



CHALMERS
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Strategies to achieve high performance in hybrid project teams

Addressing the relationship between Swedish project managers and Indian specialists at IBM Global Services

Master's Thesis in the Master's Programme International Project Management and Project Management

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International Project Management
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Cover:

The Team – The picture illustrates the diversity found in a team, that individuals have different skills and abilities. Matching individual's strengths with the right activities and strive to continuously improve, individuals will find their spot and perform well in the team. The outcome of their collective contribution will be greater than the sum of each individual contribution.

Department of Civil and Environmental Engineering
Göteborg, Sweden, 2015

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ABSTRACT

AIM – The aim of this research is to determine the meaning of high performance within a hybrid project team operating in an international setting, and how project managers can govern these team members to achieve high performance.

METHOD – The research design was qualitative including a single case study at IBM global services. Ten semi-structured interviews were performed in total with six respondents from India and four from Sweden. During the interviews open-ended questions were asked and any ethical implications were considered.

FINDINGS – To successfully govern a hybrid project team to achieve high performance seven strategies related to project management processes and leadership were concluded from the findings. The on-boarding process – that enables a strong cohesiveness by having an initial meeting. The consensus planning process – that ensures a reliable time estimation of deliverables. Reliable measureable data – emphasises the importance that input data to measure project performance is reflecting reality. Frequent feedback mechanisms – that high performance is achieved when using both formal and informal channels to communicate feedback more frequently. The application of small deliverables – that ensures a higher rate of successful delivery. Adaptive leadership – a project manager will need to exercise both guiding and supporting leadership styles to achieve high performance. The cultural training – can increase the cultural awareness and consequently the quality of communication, cohesion and performance in the team.

CONCLUSIONS – This study provides an insight into the factors having an impact on performance in a hybrid project team, what defines high performance, and how a project manager can successfully govern a team in an international setting to achieve high performance.

Key words: ibm, high performance, leadership, cohesion, motivation, virtual team, hybrid project team, strategies, consensus, feedback, culture, cultural awareness

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Preface

In this exploratory research, the researcher has defined the meaning of high performance and the strategies to achieve high performance in a hybrid project team. The research has been carried out from December 2014 to June 2015. This work has involved an extensive exploration of current literature, and interviewing with ten employees working at International Business Machines Corporation (IBM). The study has been carried out to fulfil the dual award requirement for the MSc programme in International Project Management at Chalmers University of Technology, Sweden and Project Management at Northumbria University, UK.

I would like to thank the involved interviewees at IBM, for offering their valuable time into this research, and my supervisor Stefan Gunnarsson at IBM for the support during the planning phase of this research and the arrangement of Specialists human resources. I would also like to thank Alberto Pietrobon at IBM for arranging Project Manager human resources into this study.

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Robin Bard

1 Introduction

In this chapter the author introduces the reader on the background information of this dissertation. The introduction is further formulated to present the theoretical rationale, research aim, briefly the research methodology, and the context of the dissertation organisation in this study. The scope and limitations and the structure of this dissertation are also presented. The aim of this chapter is therefore to outline the rationale behind the study and to provide an overview of this dissertation.

1.1 Background

The advancement in communication technologies is changing the possibilities in how workplace collaboration is conducted and the processes in which organisations are executing their projects. By using technology and global resources, project-based organisations are able to perform tasks across time, distance, and organisational boundaries. Projects that traditionally were performed locally by pure face-to-face teams are now invited to extend the workplace to also incorporate international resources by utilising virtual teams. The application of virtual teams in a project can be very cost-effective since any time and environmental impact involved in travelling will be reduced, and also the possibility to temporarily acquire a specific skill at short notice when needed. Even though the utilisation of virtual teams brings a variety of benefits, some organisations choose to work in a mixed mode combining both face-to-face and virtual teams in a hybrid project team (Singh and Lano, 2014). A hybrid project team is characterised by team members that meet and communicate face-to-face occasionally, whilst working virtual in the majority of the time (Fiol and O'Connor, 2005; Cousins et. al., 2007). A reason why project-based organisations are choosing the hybrid project team type is partly because of the ability to govern the project more closely towards the needs of the client. Further, to understand the local culture of the client, and by having the ability to acquire expertise from virtual resources when needed.

1.2 Theoretical rationale

A review of previous research have shown that project managers are likely to encounter a range of additional challenges when governing a hybrid project team that utilises virtual teams and cultural diversity (Nemiro et. al, 2008, p. 353; Gibson and Cohen, 2003 p.382; Bringas, 2008; MacGregor, 2007 p.236; Huang et. al, 2010; Settle-Murphy, 2012 p.3; Lee, 2013; Cousins et al., 2007). The review also shows that there is a relationship between the performances of the team and the implications of practicing different types of leadership styles within these teams (Walumbwa et al., 2005), especially when managing project members from different cultures.

In the study by Johnson et al. (2002) the findings show that virtual team performance is dependent on how well the team was able to establish procedures, resolve conflicts, and collaborate to bring about a successful task. Building trust, reading verbal and nonverbal cues were also showing to be more challenging when working in a virtual team with less social interaction. Other challenges identified in virtual teams also

linked to social interaction, were the absence of willingness to participate, engage in planning, having individual disagreements or conflicting schedules.

Lee (2013) argues that a leader must be aware of the different cultures that may exist in a team. That each individual may require a unique leadership style, and that different languages or regional cultural differences could have an impact the project success. Managing cross-cultural teams is consequently relevant to team performance, since the expectation of a project is strongly affected by the cultures surrounding it. Project managers that practice leadership must therefore adapt their approach when confronting team members from a country in for example Asia, while that behaviour has to change radically to get the best out of the team members located in Northern Europe. Although a face-to-face team will experience less difficulty in the factors abovementioned, a pure face-to-face team will lack in flexibility to acquire expertise when needed and work around the clock (Settle-Murphy, 2012). Mixing these two team types has shown to adversely affect performance, since team members only meet occasionally (Cousins et al., 2007).

Nemiro et al. (2008) highlight in their research that a high performing virtual team is placing emphasis on team members' cultural awareness and their commitment towards trust and leadership. In comparison to another study by Nelson (2010), a high performing face-to-face team is highly cohesive and is working towards a common goal. A high performing face-to-face team is typically acknowledging a clear purpose, is confident in overcoming obstacles, have strong interpersonal communication skills, and effective decision making methods. Also, individuals and team achievements are being recognized by the leader, the team members and inside the organisation.

This study intends to focus on projects within a global firm. These are typically performed by individuals that originate from different nationalities and native cultures. The study as such, is therefore particularly interesting in the perspective of governing a hybrid project team in an international setting. The review shows that there are unique challenges involved when working in a hybrid project team composed by both virtual and face-to-face teams. The outcome of a project involving interdependent work is highly depending on the contributions of the members in a team, the processes surrounding a project (Dyer and Dyer 2013; Mathieu et al., 2000; Shani, 2009), and the type of leadership style chosen (Lee, 2013; Shani, 2009). In contrast to a traditional face-to-face project team any cultural differences present in a virtual or hybrid project team may also impact on team performance (Lisak and Erez, 2009). Since the outcome of a project is highly depending on these factors, it can be assumed that the factors will have an effect on the level of performance in a hybrid project team.

In this explorative study, the author intends to investigate if there are any differences found in hybrid projects and what factors that are impacting on performance when combining virtual and face-to-face team members. If the factors are different, which are critical to achieve high performance? The lack in literature on factors affecting performance and a definition on high performance in regards to hybrid project teams gives the necessity to study this particular topic, and also why it has to be an explorative study. Because of the absence in regards to hybrid project teams, the theoretical rationale to carry out the study is justified.

1.3 Research aim and research question

The aim of this research is to:

Determine the meaning of high performance within a hybrid project team operating in an international setting, and how project managers can govern these team members to achieve high performance.

Main research question to be answered:

How can project managers govern a hybrid project team and achieve high performance?

Supporting questions to answer the main research question:

1. *What are the factors affecting performance in a hybrid project team?*
2. *What defines a high performing hybrid project team?*
3. *What are the strategies for achieving high performance in a hybrid project team?*

1.4 The context of the dissertation organisation

International Business Machines Corporation, IBM, was founded in 1911, and has developed since to operate in 170 countries, with 435 000 employees worldwide. IBM has constantly evolved since the entrance, and has over the past decades shifted the business away from the consumer market such as personal computers, to focus more on profitable businesses in areas of business intelligence, data analytics, business continuity, data security, cloud computing, virtualization and green solutions. Today, IBM consists of four main divisions: Global Services, Software, Systems and Technology and Global Financing, where Global Services, GS, is the division that was focused on in this study. The division of IBM GS has established eight global delivery centers worldwide, where the largest center with 60,000 employees is located in India (Musio, 2009). The purpose of the IBM GS India programme is to satisfy the demand of special expertise required in a project, and India is capable in offering a pool with competitive and highly skilled talents. IBM Sweden has been delivering offshore projects to India for several years, in various levels of size and complexity, which brings benefits often requested by the client's such as operation around the clock and keeping project cost low.

1.5 Research scope and limitations

The scope of this study is limited to the context of a single case organisation, which means that the research outcomes will only be related to the specific context of the case organisation. The study determines the meaning of high performance within a hybrid project team operating in an international setting, and how project managers can govern these team members to achieve high performance. The international setting is limited to project team members located in India and project managers in Sweden, and where the client is located in Sweden. In a project with dispersed team

members allocated in a hybrid project team, a project manager encounters additional performance affecting factors compared with a traditional face-to-face project team where people interact in person on daily basis, as stated in the theoretical rationale for this study. A single case study limited the ability in external validity, generalization to a broader context (Bryman, 2012). To increase the validity for the single case study, the researcher extended the number of participants to take part in the interviews. The study was limited to ten interviews in total, whereof four interviews were conducted with project managers and six interviews were conducted with project members. The interviews, together with the case study were used to collect primary data for this study.

1.6 Research methodology

The theoretical frame of reference in this study was obtained by reviewing theories developed in previous research. Theories were selected due to their relevance to the research aim, and thus based upon the reasoning that they were likely to have an impact on team performance in a hybrid project team. The theories created the foundation for the study to look into the factors affecting the performance in a hybrid project team.

The collection of empirical data was obtained through interviews with participants accessible from IBM Global Services. The interview guides were developed to confirm and identify the factors, and to explore the meaning of high performance in hybrid project teams. The interviewees that took part of this study were selected by IBM, where the author was granted to request project managers from Sweden and project members from India, and having past experience of working in a hybrid project team. The interviews were conducted partly face-to-face at the IBM offices located in Gothenburg and Helsingborg, and remotely through AT&T telephone conference and Skype video calls.

1.7 Structure of the dissertation

The following chapters of the dissertation are organised based upon the research sequence. Chapter two reviews theories of team performance, followed by the barriers and benefits affecting performance in a hybrid project team. Chapter three presents the justification of the research methodology selection. Chapter four evaluates the findings. In chapter five and six the author presents the discussion, conclusion and future research of this dissertation, based upon the evaluation of data from the findings and the theoretical frame of reference. The entire appendixes are provided in the end of the dissertation.

2 Theoretical frame of reference

In this chapter, the author presents and compares previous research on team performance, and if applicable, derives the components that can be related to hybrid project teams. The factors affecting performance are referred to virtual and face-to-face teams, since each sub-team type in a hybrid project team will impact differently on performance. Most emphasis is placed on virtual teams. The frameworks called The four C's of team performance by Dyer and Dyer (2013) and Factors Affecting Group Development and Performance by Shani (2009) together with other author's research contributed in designing the foundation of the theoretical framework for this research. This framework was then used to evaluate the factors having an impact on team performance in the case organisation context.

2.1 Hybrid Project Teams

A hybrid project team is characterised by team members that meet and communicate face-to-face occasionally, whilst working virtual in the majority of the time (Fiol and O'Connor, 2005; Cousins et. al., 2007). Hybrid project teams are therefore perceived as a combination of the characteristics found in a traditional face-to-face team and virtual team, and the level of virtuality is decided by the organisation itself. Cousins et al. (2007) is emphasizing the difficulty in establishing team identification in hybrid teams as a serious challenge that could adversely affect performance, since team members only meet occasionally. Since hybrid project teams include both virtual and face-to-face team collaboration, it is relevant to define the characteristics and compare these two team types.

2.1.1 Virtual teams

A virtual team is characterised as a distributed collaborative team with dispersed team members, cultures, knowledge and physical locations, with a common goal of carrying out interdependent tasks by using technology as a primary tool for communication (Bosch-Sijtsema et al., 2011; Settle-Murphy, 2012; Trautsch, 2003; Huang et al. 2010). In other words, a virtual team can work across time, distance, and organizational boundaries to accomplish a common set of goals. Virtual teams which are often found in project-based organisations are comprised of temporary systems, uniting people and technology, where team members may be assigned to multiple projects whenever their expertise is needed (Bosch-Sijtsema et al., 2011; Trautsch, 2003; Verburg et. al, 2013). The rationale behind this working method is to reduce project costs, any environmental impact involved in travelling and to utilize employees' time and skills more efficiently (Bringas, 2008; Settle-Murphy, 2012; Trautsch, 2003; Huang et. al, 2010). While projects utilising virtual teams will be benefited by a diverse set of skills, having the capability of operating 24-hours a day, project managers are likely to encounter a range of unique challenges compared with a pure face-to-face project team (Nemiro et al., 2008, p. 353; Gibson & Cohen, 2003 p.382; Bringas, 2008; MacGregor, 2007 p.236; Huang et al., 2010; Settle-Murphy, 2012 p.3).

2.1.2 Face-to-face teams

In contrast to virtual teams, face-to-face teams are collocated and limited to a specific location (Fiol and O'Connor, 2005). Members in a face-to-face team are not necessarily limited to a single native culture, since the team could be composed by individuals from different cultural backgrounds. However, the team is most likely to be influenced by the culture of the local organisation or country. The limitation to a single location in face-to-face teams is affecting the capability of operating 24-hours a day, which is rarely being performed (Settle-Murphy, 2012). In comparison with virtual teams, communication in face-to-face teams has several advantages over a pure technology-based communication channel (Purvanova and Bono, 2009). Communications in face-to-face teams are typically multi-channel, where individuals communicate over additional channels, and are richer in visual and auditory cues. The social presence and contextual understanding also tends to be stronger in face-to-face teams.

2.2 Cultural dimensions

Hofstede developed six dimensions in which he compared the fundamental differences of behaviours between cultures (Chatterjee, 2014; Hofstede et al., 2010). Analysis of the cultural dimensions is widely used in business and management research to explain the similarities and distinctions of cultures. The dimensions of individualism versus collectivism, power distance and uncertainty avoidance have been most prevalent in connection to virtual team research (Clemons and Kroth, 2010; Duarte and Snyder, 2006; Dugas, 2013; Lee, 2013). Since any cultural differences present in a team may impact on performance (Lisak and Erez, 2009), the three dimensions will be further explained below.

The *individualism versus collectivism* dimension is concerned with whether individuals are focusing on individualistic or collectivistic needs (Dugas, 2013; Hofstede et al., 2010). For an individualist, personal interests, growth and gains prevail over equality of others, and members expect to have private opinions in a team, and take responsibility of actions made. Individualists are typically seekers of challenging work opportunities. A collectivist on the other hand, prevail a collective interest over individual needs and conforms to predetermined opinions of a team. Collectivists are seekers of good work conditions and are known to be strong integrators for cohesive teams, by being supportive towards other team members. In relation to the research by Gesteland (2012) sincerity can be further explored by linking the relationship-focused culture with collectivism and deal-focused culture with individualism (Wunderle, 2006). In a relationship-focused culture, people prefer to do business with people they know (Wunderle, 2006), and tend to avoid saying something that the receiver may find unpleasant (Gesteland, 2012). This might be confusing for an individual from a deal-focused culture, since it tends to focus more on the business goals, and expects people to be more open and direct in their answers without the need of building a relationship (Wunderle, 2006). Likewise, an individual from the relationship-focused culture may find it rude with the deal-focused bluntness. This type of behaviour can be explained by looking into what people really mean by being sincere (Gesteland, 2012). In a deal-focused culture, honesty and

frankness is valued the most, while in the relationship-focused culture, people are willing to help out even if they are unable to complete the favour.

Another cultural dimension by Hofstede is *power distance*, which can be either high or low (Chatterjee, 2014; Dugas, 2013; Hofstede et al., 2010). At a high power distance, people will accept hierarchy and that power are distributed unequally. In contrast, at a low power distance, people entrust in having equal power sharing, and discourages having power due to a hierarchical position. The level of power distance will influence the preferred leadership style in a team. In a low power distance culture the leader involves the team in decision making, and sees all team members as equal. In a high power distance culture the leader is more authoritarian, and is entitled to exercise many privileges.

The dimension of *uncertainty avoidance* can either be high or low and is concerned with the tolerance of going into the unknown, such as sudden changes in the work environment (Hofstede et al., 2010; Wunderle, 2006). Cultures with high uncertainty avoidance are using means to regulate and minimize uncertainty (Hofstede et al., 2010; Wunderle, 2006). Individuals in a high uncertainty avoiding culture are motivated by security and are typically high in stress (Hofstede et al., 2010; Wunderle, 2006), and have an inner urge to work hard (Hofstede et al., 2010). In contrast, cultures with low in uncertainty avoidance are open to adapt more seamlessly to change, are motivated by achievements and work hard only when needed.

Effective leaders who operate in a different culture to their own, are sensitive to the cultural context surrounding them, and will try a variety of approaches to motivate team members, while carefully examining the impact on performance (Shani, 2009).

2.3 Team Performance

In a previous study by Katzenbach and Smith (1993), the authors claim that a *team* is a composition of each team member's effort in a joint collective work, and that their performance level is greater than the sum of each individual effort. While this may be true for a well-functioning team, it is argued that in some circumstances individuals outperform teams (Shani, 2009), and there may be several reasons for poor team performance (Dyer and Dyer, 2013; Shani, 2009; Lencioni, 2002). Without clear goals or performance metrics, a team may be unaware of the expectations or the adjustments that needs to be made. The composition of the team may not match the skills or abilities needed for the intended tasks (Shani, 2009). The dynamics in the team may not foster creative problem solving or how to improve performance (Watson et al., 1993). According to Lencioni (2002), teams can unknowingly become weaker in five stages, affecting team cohesiveness, in the *five dysfunctions of a team*. The stages are illustrated in figure 1. The first dysfunction is called the absence of trust, where team members are unwilling to show vulnerability towards other members involved in the team. This behaviour can have a negative impact on the trust in the team by not being open about weaknesses and mistakes during a project. If team members are becoming aware of the weaknesses, the team can develop an action plan to continually improve the performance of the team (Dyer and Dyer, 2013). Failing in building trust can lead to the next stage called fear of conflict, where teams

are incapable of having productive discussions around an activity, which can lead to defensive behaviours. Acknowledging conflicts and overcome these will strengthen a team's ability in reaching consensus (Shani, 2009). In contrast, any unresolved conflicts can have the reversed effect, decreasing the desire of commitment. At the stage called lack of commitment, members will not passionately contribute in discussions, consequently affecting the quality of decision making (Lencioni, 2002). If the team remains in the stage of unwilling to show commitment, the members will develop an avoidance of accountability. At this stage, even highly driven team members will resign from teamwork and work more individually. Failing in having accountability will open for inattention of results, where members will prioritize their own needs above the collective needs of the team. The dysfunctions can also emerge from other circumstances, but will either way impact negatively on the teamwork capability.



Figure 1 The five dysfunctions of a team (Lencioni, 2002, p.188)

Based on a comprehensive literature review on team performance, Dyer and Dyer (2013) and Shani (2009) defined two frameworks that can illustrate the components having an impact on team performance. The frameworks share the same position that a team must have a clear purpose, and is influenced by the context surrounding it. Further, the composition in terms of team member's skills and abilities, and their motivation are critical for performance. A high performing team is able to solve problems, communicate, manage conflicts and make decisions efficiently. The most successful team leadership is task oriented and has emotional and social cognitive abilities (Shani, 2009). Below these factors are discussed in more detail.

2.3.1 Purpose and context

All types of project teams should have a purpose, with goals and objectives and are the primary reason for teamwork (Nelson, 2010; Shani, 2009). The purpose of the team should be clearly understood by all team members, since the complexity of tasks often requires cross-functional resources in an interdependent teamwork (Shani, 2009; Dyer and Dyer, 2013). An introductory meeting, face-to-face, has been found to

facilitate the communication of clear goals, the context, and the development of trust (Gibson & Cohen, 2003). The context refers to contextual factors that influence the development and performance of the team. These can be internal and external to the organisation. The factors can include internal characteristics such as rewards systems, organisation structure, culture and external characteristics such as competitive pressures, economic and technological change. Dyer and Dyer (2013) suggest that managers can govern the context effectively by establishing reward systems that will reward team performance over individual performance and by removing any obstacles to teamwork that a formal organisational structure might create. Adapting the organisational culture to the context also seems to play an important role in supporting teamwork processes and collaborative behaviour. The culture that exists inside an organisation could be seen as an evolutionary process, and is a complex environment to manage. Aside from the organization as a whole, subcultures could also evolve within a team, when the team is composed (Shani, 2009).

2.3.2 Team composition

Projects are often composed by individuals with a determined set of characteristics, such as gender, educational background, knowledge, skills, motivation and cognitive abilities. In addition, they hold values, beliefs, and attitudes towards the project and the organisation (Shani, 2009). Project members are also possessing different cognitive abilities in their way of confronting problem-solving, which will determine their strengths and weaknesses in their ability to carry out activities and tasks. Having a cultural diverse team has shown over time to excel performance in areas of problem-solving and creative thinking, compared to a cultural homogenous team (Watson et al., 1993). Another study has also confirmed that a heterogeneous mix is likely to have a positive effect on performance and creativity through the complementarities of a diverse set of skills and cognitive abilities when confronted with problem solving (Kyprianidou et al., 2012). The homogeneous team on the other hand may experience less conflicts and lower turnover of employees, and will therefore create a higher satisfaction among the team members (Shani, 2009). The preconditions will influence the dynamics and performance of the team, and should be considered in the selection process when composing the project's team members.

2.3.2.1 Cultural awareness

Team members confronted with cultural diversity may have different social behaviours, values and perceptions that may affect the work patterns or how they socialize with other team members (Rinuastuti et al., 2014). In relation to a hybrid project team operating in an international environment, team members are likely to encounter a variety of cultures in a project. A cultural diverse team, also known as a multicultural team, is a group of people from different cultures that collectively performs activities (Lisak and Erez, 2009). Teams operating in a multicultural environment are likely to face barriers in how they communicate with people from other cultures (Butler and Zander, 2010). If individuals in these teams are able to develop an awareness of the different cultures existing in the team, they will understand why people from other cultures behave in a certain way in a specific situation (Peterson, 2004). Being aware of the cultures surrounding a project will enable the members of the team to communicate and achieve an improved mutual

understanding of each other. A highly developed cultural awareness in a team will also foster team cohesion, social integration (Auyko and Härtel, 2006), and thereby increase the performance (Lisak and Erez, 2009).

2.3.3 Team motivation, cohesion and rewards

Throughout a project life-cycle a project manager must consider the importance of individuality, since motivation can stimulate individuals to engage in teamwork, overcome challenges and reach common goals and objectives (Peterson, 2007). Individuals often join a project team because they have some kind of needs to fulfil, that will affect their motivation to participate. Their needs will have a direct impact on the performance of the team, which in turn will affect the triple constraint of the project success factors, to deliver on time, within budget and at a high quality. In the past, research in motivation theory has been carried out by several scholars. One theory that has been prominent in virtual team research is McClelland's Acquired Needs Theory (Jenster, 2010; Lee, 2013; Peterson, 2007). Originally, McClelland (1967) developed a motivation theory where he believed that everyone has a need for *achievement*, need for *affiliation* and a need for *power* (Peterson, 2007).

Achievement driven individuals are likely to be self-driven and define clear goals and use efforts to fulfil these (Lee, 2013). Individuals who are motivated by achievements will also be able to support the team with clear objectives. To enable the achievement need, tasks should be challenging, and the work environment creative, to open up for own initiative taking that is beyond one's role (Peterson, 2007).

Individuals who are driven by *affiliation* are drawn to a friendly work atmosphere, and strive for unity and assist others in a team (Lee, 2013). An individual with affiliation need will work well with others, while lack motivation when working on their own. A project manager can satisfy individuals with affiliation needs by assigning them to tasks that involves interaction with other people and common goals (Peterson, 2007). Having individuals with affiliation needs will foster a supportive team environment, but may be encouraged to groupthink.

McClelland's *power* need is associated with goal and direction manipulation (Peterson, 2007). An individual with power needs are most likely drawn to a leadership or management position, to obtain control or steer the project in a desired direction (Lee, 2013). Project managers can experience conflicts with individuals who seek power needs, and would therefore need to be clear about the line of control and the desired direction of the project (Peterson, 2007).

Feeling of affiliation has shown to be critical for fostering team *cohesion* (Shani, 2009). Previous studies have also proven that there is a relationship between cohesion and productivity (Beal et al., 2003; Chiocchio and Essiembre, 2009). Having strong team cohesion is important to foster collaborative behaviour. A highly cohesive team is by definition fulfilling the needs of the members in the team (Shani, 2009). A truly cohesive team is also able to maintain trust, acceptance, engage openly about conflicts, is committed to decisions, hold each other accountable for actions, and will focus on achievement of collective outcomes (Lencioni, 2002). A highly cohesive

team is reaching goals more efficiently than a low cohesive team, and members tend to show less anxiety and have a higher self-esteem (Shani, 2009).

Rewards have shown to have and a direct impact on satisfaction and productivity (Shani, 2009). Individuals in a team may value rewards differently, and value social relationships stronger than monetary rewards. The rewards present, needs to be balanced with the effort needed in order for one to perform. The expectancy of a reward needs to reflect the right type of reward, which can be either *intrinsic* or *extrinsic*. Intrinsic rewards are intangible and typically related to the own individuals achievement, recognition or satisfaction (Panagopoulos, 2013). Extrinsic rewards are tangible, external to the individual, and are often physically obtained in a form of monetary value for the individual. Intrinsic rewards have shown to be the reward type that really motivates individuals.

If reward systems are adapted in a way that they are closely associated with work performance, individuals can expect to receive fair rewards (Shani, 2009). By understanding individual's value in rewards, a project manager will be able to increase the satisfaction, which will consequently affect the performance of the members in the team.

Incentives such as rewards can increase collaborative behaviour, if teamwork is rewarded over individual performance (Dyer et. al., 2013; Rowe, 2000; Olson and Olson, 2012). If all members receive the same reward, the challenge would be to satisfy the equity on individual performances, especially if the effort is unevenly distributed in the team (Shani, 2009). Too much emphasis on rewarding individual performances is likely to increase competitiveness, which in turn will reduce team productivity (Rowe, 2000). Although having incentives on individual performance is important to maintain accountability. Having a mixed reward structure that empathises on both the individual and team level will stimulate collaboration and accountability (Rowe, 2000).

2.3.4 Job characteristics

Performance can be explored through *Hackman's Job Characteristics model* (Ali et al., 2014; Hackman and Oldham, 1975; Shani, 2009). The model assumes that the job itself has core characteristics that will create psychological states, affecting the motivation, performance and satisfaction of a team member, as illustrated in figure 2.

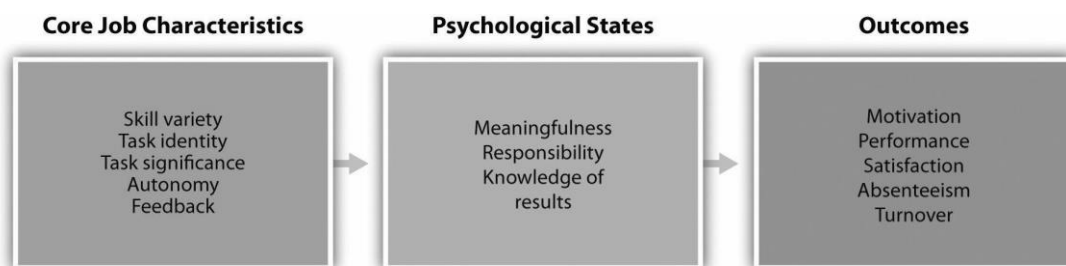


Figure 2 *Hackman's Job Characteristics model, adapted from Hackman and Oldham (1975, p.161).*

The psychological states are grouped into the *meaningfulness* of the task, the *responsibility* of the outcomes, and *knowledge* about the results of tasks performed. The states are affected by the design of the work in five dimensions, *skill variety*, *task identity*, *task significance*, *autonomy* and *feedback* (Ali et al., 2014; Shani, 2009). Having skill variety implies the degree in which the individual will be able to draw different set of skills on activities (Ali et al., 2014). Task identity is to the extent in which the individual is able to complete the task at hand (Shani, 2009). Task significance is to the degree the individual perceives the task to be of importance for other people (Ali et al., 2014; Shani, 2009). The dimension of having autonomy implies of having the freedom and independence to carry out tasks (Shani, 2009). Autonomy can motivate individuals to try new ideas and learn from consequences (Ali et al., 2014). In relation to task interdependency, the job characteristics can determine the level of collaborative behaviour in a team. Low task interdependency can decrease collaboration. In opposite, having high task interdependency can increase collaboration but also the complexity of coordinating tasks (Adler, 2009; Olson and Olson, 2012). In virtual teams, where the distance is a challenge, high task interdependency is linked with increased need for communication, adjustment and coordination (Olson and Olson, 2012). This environment is highly dependent on trust, that each team member will focus their use of skills and abilities for an outcome that others are dependent on. A team with coordination difficulties will respond to a lower interdependency. A previous study also suggests that cohesion is more strongly related to performance in teams with highly interdependent roles (Gully et al., 1995). Feedback is the level of information that individuals receives on their performance. A study has shown that any delay of receiving feedback can decrease performance (Kettle and Häubl, 2010). In contrast, receiving feedback in time can prevent the decline of performance. Project managers can give feedback to individuals in areas that need further improvement and can contribute in the understanding of the nature of the work (Ali et al., 2014). Having well-functioning feedback mechanisms inside an organisation has shown positive effects on team satisfaction, cohesion, consensus and efficiency (Kahai et. al., 2012). The dispersion of team members in a virtual team makes it challenging for a leader to provide feedback on their performance. In this environment, leaders can develop a process where team members are encouraged to monitor other team members and give feedback on their performance. Feedback can be given on individual performance but also on team performance. Positive feedback can increase the confidence of the team, or a specific team member. Negative or constructive feedback has shown to improve decision quality. Gaining a greater level of positive feedback can lead to less task focus. Less task focus can in turn have a negative effect on that individual's reasoning in decision making. In conjunction to feedback, mentoring is a process a project manager can use in order to guide individuals towards improvement. Mentoring can provide a good opportunity to apply clarifications and consent in what to improve (Peterson, 2007).

If project managers are delegating responsibilities and increasing involvement of team members in areas concerning decision making, they are more likely to have an increased motivation to put additional efforts in their work performance (Shani, 2009). The design and processes involved in the work itself will form the preconditions in whether the individuals will induce a higher level of the outcomes.

2.3.5 Team processes

Team processes are defined as the interdependent interaction between team members, and how their collective input is transformed to an output to achieve common goals (Honts et al., 2012). Team processes suitable for a specific project have a tendency to vary, and is highly depending on the team type. In hybrid project teams, individuals are primary faced with challenges regarding processes involving communication, decision making, conflict management and trust (Johnson et al., 2002; Cousins et al., 2007).

2.3.5.1 Communication and technology

Projects involving teams working in different time zones combining virtual and collocated team members are likely to rely on technology to communicate (Hinds and Bailey, 2003). Understanding the technological needs of the team and matching this need with the technology available is essential to increase the effectiveness of communication (Bringas, 2008). In addition, technology must also match task requirements. The technology mediation as such, would impact on the way teamwork is conducted, even for the collocated team, resulting in less face-to-face interactions (Hinds and Bailey, 2003). The communication used in hybrid project teams tends to be more asynchronous than synchronous (Salisbury et al., 2006). Synchronous differs from asynchronous by establishing a communication channel in real time, in a media such as chat or telephone, where the message is sent and received instantly without a noticeable delay (Ruggieri et al., 2013). In asynchronous communication a message is sent and received at different times with a noticeable delay, in a media such as email. In a hybrid project team that utilises virtual team members, communication tends to rely on asynchronous communication, such as email over body language, chat or direct verbal communication channels (Salisbury et al., 2006). It has been found that providing teams with synchronous communication channels can increase the social presence of the team (Bringas, 2008). Social presence is defined as to the degree technology is establishing a personal connection with the members of the team. Research has shown that increasing social presence in virtual teams can improve relationships, trust and conflict resolution (Clemons and Kroth, 2010). It has been argued that any technological change is likely to affect the psychological contract an individual has established over time such as the expectations towards the organisation and the level of motivation one has to perform the job (Shani, 2009). A psychological contract is defined as the perceived level of mutual obligations individuals and the organisation expects from each other (George, 2009). The change in psychological contract is also likely to affect the work design in the dimensions of feedback, task significance, task autonomy and task variety, in relation to Hackman's Job Characteristics model. Research also shows that the physical distance between team members can affect the psychological distance as well (Salisbury et al., 2006). Consequently, the physical dispersion of virtual team members might hinder the creation of team cohesiveness. The technology in how a project team is sharing knowledge can also impact on performance and productivity. Bosch-Sijtsema et al. (2011) suggest in their study that project-based organisations can facilitate knowledge sharing in distributed teams by having a supportive infrastructure that enables ways of sharing pictures and ideas more seamlessly. The study by Bosch-Sijtsema et al. (2011) share a similar view earlier mentioned by Bringas (2008), that technology should match the requirements of a remote work.

2.3.5.2 Decision making

The decision making process is fundamental to the capability of efficient teamwork (Dyer and Dyer, 2013; Shani, 2009). A decision can be made by a leader alone, by involving the team or by the team itself. A leader that invites team members in decision making can foster a creative environment in the team, by getting their ideas and suggestions before making a decision (Shani, 2009). The involvement will also gain support from the team members later in a project (Peterson, 2007). The key is to make use of the resources available. Effective team decision making involves both strong interpersonal skills and effective problem solving skills. Strong interpersonal skills are typically good verbal communication and listening skills, and the ability to support others and contribute in decision making (Beebe et al., 2011; Shani, 2009). A team can become more effective in making decisions by improving their interpersonal processes. *Consensus* is a decision making concept to make full use of available resources for resolving conflicting views in a creative way (Shani, 2009). Complete consensus is often difficult to reach. In this process, it is important to get input from all team members, be willing to change view if another makes more sense, and assume that conflicting views can generate new ideas. When all team members have accepted a solution on the basis of logic and feasibility, consensus is reached. Weak consensus is typically described when one or several individuals have a strong position, which others are not accepting. The consensus process is advantageous if the decision is important to the team's performance, if there is time available, and if it is important to develop a commitment towards a decision. A step-by-step guide for reaching consensus is found in appendix C.

2.3.5.3 Trust and trustworthiness

Lencioni (2002) describes the absence of trust in the five dysfunctions of a team as a behavioural intention of unwillingness to show vulnerability towards other team members. The implications of not having trust in the team can develop into defensive behaviours and fear of conflicts. In a multicultural environment the absence of trust can unwillingly occur due to cultural mismatches when two individuals are misinterpreting each other (Shin, 2005). This can be linked by looking into the cultural dimensions by Hofstede et al. (2010). Individuals from the relationship-focused culture are mainly concerned with building relationships by establishing trust before doing any business (Gesteland, 2012). This is contrary with the deal-focused culture that tends to separate business and personal relationships. Trustworthiness in conjunction to trust is a multidimensional *construct of judgement* about the behaviour of another individual (Murphy and Kambara, 2014). A leader can become trustworthy by showing competence, credibility and integrity towards others (Häkkinen and Savolainen, 2011). The cultural differences may have an impact on the level of perceived trustworthiness when making an assessment about the behaviours of leaders and others in a team (Murphy and Kambara, 2014).

2.3.5.4 Conflict management

The impact on task, process or emotional conflicts have shown mixed results for virtual and face-to-face teams (Hinds and Bailey, 2003). Task conflicts have in some circumstances shown to be beneficial for performance in traditional face-to-face

teams, while being the opposite for virtual teams. Because of the distance, virtual teams will find it more difficult to grasp a shared understanding of the context they are working in. If team members have different understandings of a task, task conflict is likely to be expected. Virtual teams that lack a sense of shared context are also likely to adhere to different norms than the face-to-face team. As a result, the two teams will have different views on expectations of one another. Shin (2005), argue that virtual teams with low identity and cohesion will have an increased risk of developing internal conflicts. In the study by Shin (2005), the author pointed out that monitoring and control of others are likely to increase in virtual teams. This behaviour is known to have a negative effect on intrinsic motivation (Frey and Osterloh, 2002). Regardless the type of conflict, a virtual team needs a proactive orientation on conflict resolution to maintain productivity (Bringas, 2008). Team members should carefully observe for signs of conflicts and bring them up during a meeting to discuss possible solutions. The ability of a project manager to communicate expectations and negotiate will be critical in order to decrease ambiguity and conflicts in virtual teams.

2.3.6 Team leadership

A leader can emerge from a group naturally or by being formally assigned the role. Scholars are also discussing if leaders are naturally born with the appropriate traits or if an individual can develop leadership skills (Salovey and Mayer, 1990; Bass and Bass, 2009). There are several different leadership styles existing in previous research. There is no single leadership style that is applicable for all situations (Lee-Kelley, 2002; McCleskey, 2014). Factors such as team size, project duration, and uncertainty have indicated to influence a leader's perception of control (Lee-Kelley, 2002). However, successful leaders are able to universally apply a task-focused and relationship-focused orientation (McCleskey, 2014). Transactional, transformational and situational leadership styles have shown in a previous research to be suitable for hybrid project teams (Lee, 2013, p.37). Understanding the emotions of followers can help to develop strong relationships (Shani, 2009).

2.3.6.1 Transactional, transformational and emotional intelligence

Avolio et al. (2000) found in their study that transactional and transformational leadership styles will facilitate processes involved in virtual teams. Transactional facilitates the process by clarifying roles and task expectations and linking them to rewards (Huang et al., 2010). Clearly communicated expectations are critical for team performance (Whiteley and Johnson, 2012). Transactional leaders are typically motivating virtual team members by highlighting the contractual exchange (Lee, 2013, p.23). In comparison, transformational leadership is facilitating the process by developing a collective identity among followers, by helping them to heighten their self-efficacy (Huang et al., 2010; Shani, 2009). Self-efficacy is a belief that one has the capability to perform or achieve a certain goal. Transformational leaders need to understand followers and their culture in order to communicate a vision that is compatible, meaningful and motivating. Huang et al. (2010) concludes in their study that transactional leadership improves task cohesion to reach agreements while transformational leadership stimulates the collaborative climate in the team to improve the productivity. The findings also show that task cohesion will lead to consensus in the team, and is vital for team performance. According to Dyer and Dyer

(2013) the demands of managing a virtual team is higher than managing a face-to-face team. The leadership role in a virtual environment is more challenging and a manager should therefore allocate more time in leading a virtual team compared to a traditional face-to-face team. Leaders in virtual teams are required to have a more active role compared to leading a face-to-face team (Huang et al., 2010). A leader also needs to ensure that teams are trained in using the technology required in a virtual collaboration environment. The transformational leader is likely to modify the behaviours of the followers to become more creative by challenging their previous perspectives on problems (Huang et al., 2010). A previous study has indicated a stronger effect on team performance when practicing transformational leadership in virtual teams compared to a face-to-face team (Purvanova and Bono, 2009). Transformational leadership was more efficient in teams that were depending on technology to communicate, with less synchronous communication. Another leadership style is *Emotional Intelligence*, *EI*, in which some suggest is related to transformational leadership (Barling et al., 2000; Palmer et al., 2001; Gardner and Stough, 2002). Palmer et al. (2001) found that inspirational and motivational factors correlated to the ability of monitor emotions with the EI leadership style. In a study by Barling et al. (2000) the results suggested that EI is associated with inspirational motivation and self-efficacy. In the research by Gardner and Stough (2002) the results indicated that a leaders ability to understand emotions of others, accounted for the majority of the factors in transformational leadership. EI can be learned by truly understand one's own emotions, and how others perceive that individual (Salovey and Mayer, 1990). Exercising EI have shown to affect performance and attitudes of followers by recognizing emotions and manage relationships with them (Shani, 2009).

2.3.6.2 Situational leadership

In contrast to the group of inspirational and emotional leadership styles abovementioned, the situational leadership style belongs to a more rational approach in the practice of leadership (McCleskey, 2014). In situational leadership theory, a leader can adopt different leadership styles or behaviours when needed. In order to fully exercise situational leadership, a leader needs to become skilled and adapt multiple styles depending on the needs of a specific team member (Lee, 2013, p.41). The theory has been widely used by organisations such as IBM and Xerox, since it gives the leader a higher sense of control (Shani, 2009). In the theory, a leader can engage in being either high or low in task-focus or relationship-focus, or both at the same time. Task-focused implies to the extent a leader is communicating duties and responsibilities, when engaging in a guidance approach. Relationship-focused implies to the extent in which the leader is engaging in a two-way communication, when engaging in a supportive behaviour. Situational leadership can assist a project manager in adjusting to the maturity of a specific team member (Lee, 2013, p.54). The appliances of the orientations are available in appendix B, *situational leadership theory* (Shani, 2009).

3 Methodology

In order to answer the research question, the selection of an appropriate research method is important to ensure a reliable and valid study. This chapter will therefore provide information for the reader how the study was conducted, but also justify why the selected research method was appropriate. The chapter start with presenting the research strategy, which describes the differences between a qualitative and quantitative method, and justifies why a qualitative approach was chosen. In the Interview design and data collection subchapter, the author presents the process of designing the interview and how the data was collected, transcribed and analysed. The chapter ends with presenting the importance of considering the reliability and ethical aspects of this study.

3.1 Research Strategy

According to Bryman (2012), there are three widely used research strategies called qualitative, quantitative and mixed methods, where the last mentioned is a combination of the first two. This chapter will make a comparison between a qualitative and quantitative research strategy and describe more in-depth the qualitative research strategy, single case study, and interviewing as a method.

Bryman (2012) emphasizes that qualitative and quantitative strategies have distinctive characteristics in the philosophy of research, where the epistemological and ontological position held by the author is critical to consider when choosing a research strategy. The philosophical choice made, will impact the way research is conducted and how new knowledge is developed (Lewis et al., 2009). The philosophy can be illustrated as in figure 3, the research ‘onion’, by Lewis et al. (2009).

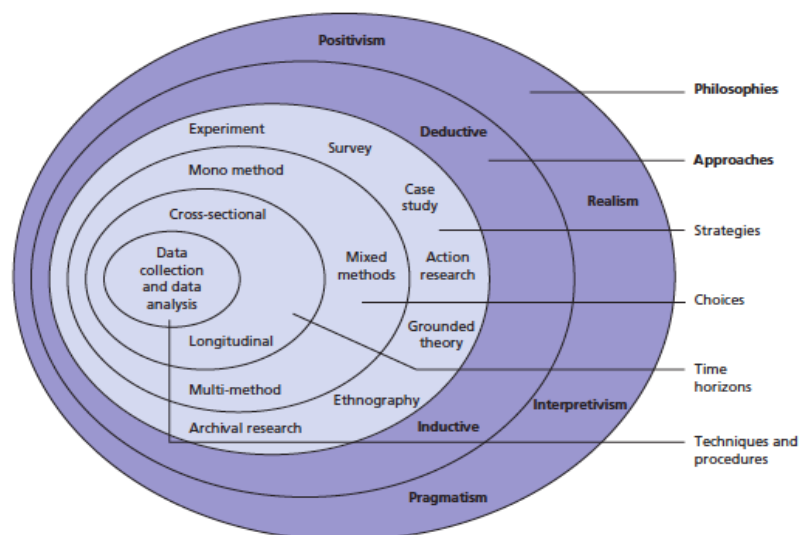


Figure 3 The research onion (Lewis et al., 2009, p.108)

3.1.1 Qualitative vs. Quantitative research strategies

The distinctiveness of both strategies is important to understand, in order to select an appropriate research strategy. Qualitative differs from quantitative research, by emphasizing on the meaning of words rather than quantification in the collection and analysis of data, and therefore quantitative research are more focused on numerical values (Bryman, 2012; Lewis et al., 2009). The strategies also differ in the orientation in the role of theory in the relation to research. In a quantitative research strategy, the scientist applies a deductive approach, by deducing a hypothesis that must then be subjected to empirical scrutiny in order to drive the process of gathering data (Bryman, 2012). The findings will then reject or confirm the hypothesis, and become the basis for a revision of theory. In the qualitative research strategy, the scientists apply an inductive approach, by making observations and detect regularities, and then formulate a hypothesis that becomes the basis for the generation of theory (Bryman, 2012). In the qualitative research strategy the epistemological orientation is held by the interpretivist position, since the social scientist needs to grasp the subjective meaning of social actors (Bryman, 2012; Lewis et al., 2009). In contrast to the qualitative research strategy, a quantitative research is influenced by positivism, where the scientist applies methods of the natural sciences to study the social world (Bryman, 2012; Lewis et al., 2009). Both strategies are also distinctive in their ontological orientation. In qualitative research strategy the researcher needs to confine to an ontological position of the constructionist asserting that social phenomena and their meanings are constantly being accomplished by social actors (Bryman, 2012). In the quantitative research strategy unlike the qualitative strategy the researcher are confined to an ontological position of the objectivist asserting that social phenomena and their meanings have an existence that is independent of social actors (Bryman, 2012). Accordingly, the aim in quantitative research is prediction and testing of theory, whereas qualitative research concentrates on the exploration of meaning and generation of theory. The distinctions between the two are illustrated in table 1 (Bryman, 2012).

Position	Quantitative	Qualitative
Principal orientation to the role of theory in relation to research	Deductive - The testing of theory	Inductive - The generation of theory
Epistemological orientation	A natural science model, in particular positivism	Interpretivism
Ontological orientation	Objectivism	Constructionism
Data analysis	Statistics and numerical values	Words and meanings

Table 1 The distinctions of research strategy, adapted from Bryman (2012).

In this research, the author intends to define the *meaning* of high performance in hybrid project teams, and therefore chooses a qualitative research approach.

3.1.2 Research approach

The aim of the research is to generate a theory about the meaning of high performance in a hybrid project team, and possible strategies to achieve high performance and it will therefore be important to capture the views by the actors involved. Bryman (2012) also argue that a qualitative method allows people to express aspects of the social world that a quantitative method may fail to capture. The author entails to view the social world as an interpretivist, since the research intends to understand the subjective meaning held by the social interactions in a hybrid project team (Bryman, 2012; Lewis et al., 2009). In the qualitative approach the epistemological position is therefore of an interpretivist. In addition, since project teams and their behaviours are social constructs it would be most fitting for the epistemological approach to look for meaning from the ontology of constructivism (Bryman, 2012). The position of interpretivist is also supported by Hart (2012), who believes that when looking at social actors and attempting to understand and explore concepts within a context, an interpretivist position is more appropriate than a positivist. The interpretivist position consequently is used when conducting the interviews. This position can be derived from the principle of induction (Bryman, 2012). The author used an inductive approach in order to emerge theory from data. The inductive approach in qualitative research is not intended to test a theory, it rather emerge theory from data (Bryman, 2012; Lewis et al., 2009). The qualitative research started with analyses of existing knowledge to detect regularities. Next, the researcher constructed a theoretical frame of reference and was adapted as the research evolved. A case study was established to gather additional data about the context surrounding the social actors. Interviews were primary used to gather data. The data collection, data analysis and results that followed required qualitative interpretations of the meanings behind the data (Bryman, 2012; Lewis et al., 2009). The research question and the aim were also revised during the research process, to conform to the findings from the empirical data (Lewis et al., 2009).

3.1.3 Single case study design

Qualitative research employs several different methods, where some methods are intensively used by scholars in business and management, such as observation and case study (Bryman, 2012; Yin, 2009). Among these, a case study allows the researcher to analyse the organisational context externally (Yin, 2009). The method facilitates the understanding of complex interdependencies involved in the organisation, and extends the experience of what is already known in previous research (Yin, 2009). A single case study was used because of the uniqueness of the context and since it would be very time consuming and difficult to get access to similar data in another organisation. The single case study was selected as a method to discover the context of the social actors, but also why people perform their work in a specific way. Secondary data about the context from past research and interview data from this research were used to construct the single case study. Generalisation and external validity have shown to be more difficult in a single case study (Yin, 2009). Instead of relying on statistical generalisation, the author selected an analytical

generalisation approach that sought to generalise to a broader theory about the relationship between Swedish project managers and Indian specialist's at the context of the IBM Global delivery India programme. The steps in designing the single case study were to define the context, the actors and their relationships.

3.2 Interview design and data collection

In a qualitative research, in-depth interviewing is fundamental (Lewis et al., 2009). In qualitative interviewing, the researcher has a great interest in the interviewee's point of view. An advantage of using the qualitative interviewing method is to facilitate the reconstruction of events by asking interviewees to remember how previous events unfolded. Bryman (2012) suggest that the most appropriate method of gathering information on the experiences and observations of participants would seem to be the use of semi-structured interviews. Bryman (2012) and Lewis et al. (2009) are describing this method as a series of questions in the general form of an interview where the interviewer has the ability to ask further questions on key responses.

3.2.1 Sampling

The case organisation has permitted the research author on conducting interviews with employees involved in their global delivery programme. The target was to perform semi-structured interviews with four project managers from Sweden and six specialists from India. In this study, a purposive sampling type was selected, as the researcher chooses the sample in a strategic way, aimed for participants that are relevant to answer the research question. This sample type is used primarily when there is a limited number of people that have expertise in the area being researched (Bryman, 2012). Purposive sampling is useful when looking for key themes, and when using an in-depth approach (Lewis et al., 2009). Such samples may be biased because prominent experts may differ from one to another. The participants have been chosen based on the criteria that they have relevant experience in project management and by working in hybrid project teams. The roles are also of high importance to the study, as project managers are the individuals who are acting as leaders, influencing their specialist's from India, who are willing to follow if they are committed to their tasks. From the case organisation, the researcher received a mix of age, and both males and females for the interviews. The mix of gender might have facilitated the creation of additional data, since the perception of the past events may differ between the genders.

The author acknowledged the risk during the interaction with people from other cultures, that personalities or values may change temporarily and no longer be representative of the individual's native culture, and may therefore limit the accuracy and validity of the study (Fang, 2012).

3.2.2 Interviewing

The aim of this study was to identify the meaning of high performance, but also to gain new insights into the strategies a project manager can practice in order to stimulate performance dependent factors in a hybrid project team. A semi-structured interview design allowed the researcher to explore for new insights that emerged

during the interviews (Lewis et al., 2009). Since all members in a hybrid project team are affecting the performance through their contribution, it was relevant to collect data from both project managers and specialists about their current and past project experiences. This approach was supported by considering the bias of selective perception. That individuals tend to perceive their environment based upon their particular frame of reference, which favours one interpretation over another, and their perception is congruent with their current needs, values and beliefs (Shani, 2009). Consequently, there were two types of interview guides, divided into a leadership perspective and a follower perspective, depending on if the participant was a project manager from Sweden or a specialist from India. The researcher conducted ten interviews in total, whereof four interviews were intended for project managers and six interviews were intended for specialists. Both interview guides were designed to be semi-structured. The first interview guide intended for project managers included ten open questions. The second interview guide intended for specialists included twelve open questions. Bryman (2012) provides a number of suggestions on how to formulate the interview questions that facilitated the researcher to answer the research question. Firstly, the interview questions should be formulated in a way that is relevant to the interviewees. Secondly, the interviewer should not ask leading questions. Thirdly, questions regarding the position in the company, number of years employed and number of years involved in a project team can help the researcher to contextualize the answer. The order, in which questions were asked, played an important role in how well the actual flow was during the interview. Questions should be grouped into sections, and general questions should precede specific ones (Bryman, 2012). It is also encouraging to go off at tangents since it gives insight into what the interviewee sees as important. The researcher acknowledged the suggestions above, and also the disadvantages of using telephone calls as an interview communication tool. To keep the interview sustainable over telephone, the length should not exceed 25 minutes. The interviewer must be aware of that visual aids cannot be employed, like in a face-to-face interview. The author facilitated this by sending the interview guide in advance to the respondents. Telephone interviewing limited the ability of observation as a second source in collecting data. In general, there was a risk that the respondents limited their answers to yes or no, especially if the interview session was taking too long or a question was not open-ended. The researcher prevented this behaviour by asking follow-up questions, such as why, and how. There was also a possibility that interviews had variation in the amount of time taken. The interviewer informed the interviewees about the risk of time extension, but that the estimated time frame per interview was one hour. The interviews were recorded using two different devices to minimize the possibility of malfunction in recording equipment. The interviewer informed the participants that the session was recorded before the interview started, and information regarding their ethical rights. Bryman (2012) suggest that the interviewer should make notes during and after the interview. This allowed the author to gather additional data about how the interview went, and consequently opened up new insights. The interviews, together with the case study were used to collect primary data for this study. The interview guides are available in appendix A.

3.2.3 Transcribing

When the researcher has conducted all the interviews, the next step in the process was to transcribe the audio that was recorded during the interviews into text. Both audio and text were considered as data for the investigation, since audio often contains additional information such as variation in voice. Variation in voice could indicate if the interviewee was certain or uncertain in their response, or if any question was unclear and needs to be reformulated. The text and audio is useful for thematising when comparing the data from each interview in the analysis. Bryman (2012) and Lewis et al. (2009) is highlighting that transcribing is a very time consuming process. That every hour recorded takes between five-ten hours to transcribe. It is helpful for the researcher to transcribe the data as soon as possible, to avoid build-ups (Lewis et al., 2009). There are also good grounds for starting an ongoing analysis early, since the researcher would become aware of emerging themes that could be asked in later interviews (Bryman, 2012). The author acknowledged the emerging themes, and considered asking additional questions during the remaining interviews. In addition to text and audio from the interviews, the notes taken during the interviews were merged in the transcribing process.

3.2.4 Analysing

In the analysis, the data from the transcripts were examined using thematic analysis. In this approach, the researcher extracted core themes by making a comparison between transcripts. The researcher identified the themes by coding each transcript (Bryman, 2012). In the coding process, the researcher broke down the data into parts and labelled them. The parts were labelled according to their origin and subject. In this process the researcher tried to interpret and make sense of the data in relation to the research questions. Some parts were removed, as the researcher did not find them to be of significance in answering the research question. The researcher also found links between parts from different transcripts. The links were then used to categorize the data into different themes in relation to the research questions. The researcher considered reliability, as presented in chapter 3.4, to verify the findings from the transcription. The narrow context of the dissertation organisation, limited the generalisability to the specific context, and not to a broader context. Meaning that the patterns found in the inductive reasoning were only related the context of the IBM Global delivery India programme.

3.3 Research ethics

The content and the amount of time needed to answer the interview questions was reviewed and adapted with feedback from the supervisor of the case organisation. Due to the geographical spread of the respondents, the supervisor also signed the consent form found in this dissertation. The researcher also acknowledges that qualitative research is more likely to involve greater ethical concerns compared with a quantitative research, since questions during the interview could cause discomfort or even stress (Lewis et. al, 2009). To ensure that ethical considerations were dealt with in a respectful and truthful manner, the author established a code of ethics (Lewis et. al, 2009). Before starting each interview, the author provided information regarding the purpose of the dissertation, and what each contribution would provide to the

research, by informed consent (Bryman, 2012; Lewis et. al, 2009). Each participant was kept confidential in the report by not exposing any names, and that any other sensitive data that could have negative consequences was excluded from the report. If requested, the author provided a copy of the transcript to a participant, and did not disclose any data to a third party. The transcript of the interviews was therefore not provided in the final report. Finally, to ensure that the author conformed to the code of ethics in this dissertation, the final report, any notes and transcripts were reviewed by the supervisor in the case organisation. By applying the code of ethics abovementioned, the author ensured that all ethical considerations were met.

3.4 Research reliability

According to Bryman (2012) the concern with reliability is how thoroughly the author is explaining the research procedures, which refers to the level of replicability, if others using the same procedures would be able to reach the same findings (Lewis et. al, 2009). The reliability of this research has been reviewed and approved by all supervisors involved. The topic of the dissertation was established early in a proposal and approved by the supervisor's at Chalmers University of Technology and Northumbria University. Afterwards, the author reviewed literature to construct the theoretical frame of reference, which has been developed in collaboration with the supervisor at Chalmers University. In parallel with this study, the author enrolled in a course called organizational behaviour, to gain a more profound understanding of the factors that affect the performance in a team. The interview questions were verified and developed together with the supervisor's at Chalmers and the case organisation to ensure open-ended, clarity and avoid leading questions (Bryman, 2012). Since the questions were open-ended, the author also seized the opportunity to ask follow up questions, in order to capture a deeper understanding of a specific area. After the interviews were conducted and transcribed, the author adjusted the research aim slightly, to conform to the results (Lewis et. al, 2009). In the next step, the author began the coding and analysis of the findings (Bryman, 2012).

3.5 The research case study

International Business Machines Corporation, IBM, was founded in 1911, and has developed since to operate in 170 countries, with 435 000 employees worldwide. IBM has constantly evolved since the entrance, and has over the past decades shifted the business away from the consumer market such as personal computers, to focus more on profitable businesses in areas of business intelligence, data analytics, business continuity, data security, cloud computing, virtualization and green solutions. Today, IBM consists of four main divisions: Global Services, Software, Systems and Technology and Global Financing, where Global Services is the division that was in focus of the case study.

3.5.1 IBM Global Services

IBM Global Services, GS, is a division of IBM and one of the world's largest business and technology services provider. At present it employs over 190,000 professionals in more than 160 countries. IBM Global Services has two major divisions: IBM Global Business Services, GBS, and IBM Global Technology

Services, GTS (Babar et al., 2009 p 218). IBM GBS is organised into six service segments: Strategy & Analytics, Business Analytics and Optimization, Application Management Services, Mid-Market, SAP Application Services, and Microsoft Services. IBM GTS is organised into four service segments: outsourcing services, business continuity and resilience, Integrated Technology Services, and Maintenance. Together they account for 46% of the organisation's employees. The IBM GS division has since 1991, generated over 40% increase of sales, and is the single largest source of revenue in IBM (IBM, 2002).

3.5.2 IBM Global Delivery India Programme

The division of IBM GS has established eight global delivery centers worldwide, where the largest center with 60,000 employees is located in India (Musio, 2009). The purpose of the India programme is to satisfy the demand of special expertise required in a project, and India is capable in offering a pool with competitive and highly skilled talents. IBM Sweden has been delivering offshore projects to India for several years, in various levels of size and complexity, which brings benefits often requested by the client's such as operation around the clock and keeping project cost low.

In this context, the division of GS is working with an offshore team located in India while having an onsite team collocated in Sweden. The onsite team consists of project managers, and specialists that communicate closely with the client. The offshore team is assigned tasks by the onsite team, which does not require any direct communication with the client. To communicate with all team members in the project, IBM is using a software platform called *Sametime* to share experiences both informally and formally. To ensure the ability to collaborate efficiently in this international and virtual setting, the demand is increased on all team members involved in the project, which can be referred to the challenges that could be found in a hybrid project team. The project manager in Sweden needs to ensure commitment and build cohesiveness in the team since dispersed team members in India are more likely to feel isolated from the project, and any cultural differences can be difficult to manage for an inexperienced project manager. A project manager is therefore having the responsibility to ensure that the team is working efficiently together to reach deadlines and deliverables.

4 Findings

This chapter presents the findings of the study. The data was obtained from the interviews with four project managers and six specialists. Notes from observations during the interviews are presented in connection to the interview data. The structure of the findings is organized into two main sections. Firstly, the main factors contributing to high performance in a hybrid project team, and secondly, the strategies to achieve high performance in a hybrid project team.

4.1 Main factors contributing to high performance in a hybrid project team

The data revealed several factors that affect performance in a hybrid project team. Since the theoretical framework already lifts up fundamental factors affecting performance in a hybrid project team, this chapter presents the main factors contributing to high performance. The structure of this chapter follows the same structure as the theoretical framework. A prominent factor was the distance to virtual team members in India, whom consequently find it more difficult to grasp clear goals and a shared contextual understanding. The findings from this factor are presented in sub-chapter *purpose and context*. A second factor affecting high performance in a hybrid project team was team member's ability to learn and understand cultural differences. The findings from this factor are presented in sub-chapter *team composition*. The third factor was related to the increased awareness of individual needs in a hybrid project team. The cultural diversity of a hybrid project team consequently created new needs for a project manager to satisfy in order to enable high performance. The findings from this factor are presented in sub-chapter *team motivation, cohesion and rewards*. A fourth factor was to the degree individuals perceived their work to be of importance for others, but also how frequently individuals were receiving feedback on their performance. The findings from this factor are presented in sub-chapter *job characteristics*. A fifth factor was related to *team processes* in the choice of technology to communicate, and how this could increase performance. The sixth factor was related to *team processes* and how decision making was made with emphasis on cultural differences. A seventh factor was related to *team processes* and how to build trustworthiness as a project manager when managing a hybrid project team. An eight factor was related to *team processes* in how to identify conflicts in a virtual team. A ninth factor was related to *team leadership*, and the impact on performance when exercising different types of leadership styles.

4.1.1 Purpose and context

The importance of having clear goals was pointed out by several project managers. To define clear goals, a project manager was required to describe what was needed to be completed at a specific time, and also ensure that the members of the hybrid project team were associated with the goals. The challenge with defining clear goals was also to match team member's strengths with the tasks required to be performed. A specialist argued that in order to work virtual, the team needs clearly defined goals:

"Virtual teams only work if you have clearly defined activities."

Solution Architect and Competence lead (India)

In conjunction to obtain clear goals, the challenge was also to make sure that the team had obtained a shared contextual understanding. Obtaining a shared contextual understanding was more challenging for a virtual team located in India. The challenge was linked to the fact that the virtual team was not in a daily face-to-face contact with the local team and the client in Sweden. In this working structure, the virtual team in India was referred to as offshore and the team in Sweden was referred to as onsite or onshore. Initially, early in the project to increase clarity and a shared contextual understanding, IBM established an on-boarding process where key project members, such as team leads and project managers met to share expectations with one another. This process was vital to become high performing:

"A high performing virtual team would go and initiate things face-to-face before the project is started."

Project Manager (Sweden)

In large complex projects with many task interdependencies the likelihood of the context to change increased. The context was also especially important to communicate when new project members entered the project. In some circumstances during the project life-cycle it was difficult to grasp a complete contextual understanding. Temporarily travel to the onsite location facilitated in grasping a more comprehensive view of customer needs and project requirements. These visitors were typically assigned an important managing role, responsible for team members in the virtual team. Visiting the onsite location and taking this view back to the virtual team in India enabled the hybrid project team to minimize misconceptions and achieve the intended goals. A solution architect and competence lead from India who visited the onsite location during the interview described this clearly by responding:

"We have people travelling from India to the customer, to understand the customers' aspects, and you work with the local team as well, you build a kind of consensus, which can be taken forward into a virtual setting from there. Once you set that connection you can work in a truly virtual environment. [...] it is also important that I understand what the person I talk to feels about their work, because I cannot build high end solutions if I do not."

Solution Architect and Competence lead (India)

In addition to achieve the intended goals, it was also clear that obtaining a shared contextual understanding contributed in achieving a higher team performance. For a virtual team located in India, it was critical that they were sensing belongingness to the hybrid project team and to something greater than just the effort in the virtual team. The connection with performance and shared contextual understanding was mentioned in one for the interviews with a business analyst:

"From my experience I believe that people who understand the bigger picture of what we want to achieve together, perform much better."

Business Analyst (India)

Although the ultimate responsibility to communicate a shared contextual understanding was assigned to the role of a project manager, a team member who was not having a clear understanding was required to step up and ask for help. This behaviour was sometimes difficult for a specialist to perform, due to cultural differences, as a business analyst stated it:

" [...] although there is not always a clear line, so when you work in a team and you have run into a difficult or unclear situation you have to step up and ask for help."

Business Analyst (India)

4.1.2 Team composition

The global delivery India programme brings extremely talented development experts into projects. In these projects, expertise is generally brought in when needed and individuals can also work within several projects simultaneously. Individuals at IBM perceive the firm to be highly competitive with the access to a wide knowledge base. Several project managers described individuals with the right set of skills, educational background and expertise to cover the needs in a project as one important factor to achieve high performance. In addition, they valued the experience on how well individuals have performed in earlier projects, and being a good fit with the culture of the project. IBM is assessing the performance of each team member every year, and this rating will be taken into consideration when assigning team members into new projects. It was also common that they replaced individuals from India who did not perform well, just average or below average. This was not just the case for the Indian specialists, in general at IBM, people are expected to perform better than average, or people will need to leave the project or even the firm. Social skills were also mentioned by some project managers, like one responded:

"Being a consultant is so much about social skills, because you should interact with people, and if you do not have the social skills, you can be an expertise within an area, but if you are not able to communicate and work with other people you will not be successful in a team."

Project Manager (Sweden)

In addition to social skills, another project manager added that having a mix of gender is important for high performance:

"In high performance you need a mix of women and male, is it important that everyone who is there is equal. "

Project Manager (Sweden)

In some circumstances, specialists were required to be in direct face-to-face contact with the client. In this process, IBM was carefully selecting individuals who had previously shown good interpersonal skills and cultural understanding in addition to the area of expertise they were possessing. There were also other demands on these individuals, such as showing accountability, be able to work individually, escalate issues or risks, and being honest. The individuals who travelled to the onsite team in Sweden and were staying for a longer period of time were named “landed resources”. For some specialists, getting the opportunity to become a landed resource was seen as a reward. Travel to the country where the client was could also be a challenge and not only good for the career. Some projects could stretch over a year, and the time away from home could be stressful for specialists with families back in India. If the landed resources were showing excellent results, IBM occasionally brought over their families to Sweden, to avoid stress and other psychological factors that could impact on the performance of these individuals.

4.1.2.1 Cultural awareness

As previously touched upon, cultural understanding was one requirement to become high performing. Specialists from India reported that cultural learning was a challenge, but also necessary to understand people from other cultures. When individuals are working as landed resources, cultural awareness becomes very important for high performance. This was not always the case for individuals in the virtual team back in India, since they rarely were in direct contact with the client or the onsite team. For larger virtual teams, IBM used a local team lead in India. Project managers were most of the time located in the country where the client was located. A virtual team lead had the primary function to overcome some of issues involved in communication that might otherwise arise due to the time difference and misunderstanding due to cultural differences. These were especially coordination and monitoring of deliverables assigned to the virtual team. As a result, the project manager would communicate directly with the team lead instead of each individual in the virtual team. It was also clear that this team lead from India would have undergone cultural training to have a mutual understanding when communicating with the project manager in Sweden. An interview with a business analyst from landed resources explained the value of developing a cultural understanding:

“[...] the more you travel, the more you work with different teams you realize that working is one thing, but it is also very important that you understand people, and develop a perception of them [...] Working in these teams with cultural differences gives you a sense of more maturity, by managing difficult situations.”

Business Analyst (India)

Several project managers perceived the challenge of having cultural awareness by how to understand the differences. They all expressed the main challenge for an Indian specialist was to understand the Swedish culture and how the client was working. In one example, a project manager developed this further by answering:

"[...] it usually takes a lot of time for them to understand that it is okay to say "I do not know" - "I will find out", because in their culture they say "yes", they can never say "no", because then you show that you lack knowledge."

Project Manager (Sweden)

The project manager pointed out that if the specialists adapted and behaved according to the Swedish culture it would improve performance. On the other hand, if a specialist was not adapting, and said "I do not know", without coming back with an answer, the individual was risking to be removed from the project. It was also important that specialists realised the importance of having equality, and not relate to hierarchal limitations that was usually the case back in India. A typical desire was to become comfortable in communicating disagreements openly without the fear of being negatively perceived by someone with a more senior title. A business analyst from landed resources confirmed the difficulty of learning the cultural differences by expressing:

"When working with different cultures such as Asia or India, you have a hierarchy where people are working in different roles, and you never step into other people's roles, and you never say directly that people are wrong. In the western part of the world, there is no distance to people, and you can be open to people and tell them if something is wrong."

Business Analyst (India)

It was also argued that a project manager involved in the global delivery India programme needed to understand the cultural differences in order to become a better communicator. For this reason, IBM only selected project managers with a previous record showing a well-developed cultural awareness to manage global delivery projects. A project manager emphasised that it was important that the team was working according to a client's culture. The initial on-boarding process early in the project facilitated to get the clients culture into the project and to ensure that the team was working according to that culture. The on-boarding process was always centralised around the needs of the client.

4.1.3 Team motivation, cohesion and rewards

It was clear that most of the specialists were highly achievement focused, and that challenging work with new learning opportunities was the main driver for motivation and an accelerator in the career. The desired learning opportunities were described as being unique and different, so it provided maximum learning. Another request was the desire for an open work culture, to provide opportunities to work within different areas without hindrance. The main driver for motivation was expressed by one specialist:

"If the challenge would be there, I would be ready to take it up, either if it is customer challenge or delivery. It should also help me to move into the next level in terms of career roles. With an increased role, you also have increased challenges."

Solution architect and competence lead (India)

Although challenging work was the main driver, it was also argued that having passion in the type of work an individual was assigned, increased the performance of this individual. Assigning a less appealing task would consequently decrease performance, as one specialist expressed it:

"If you do just want to climb the ladder, it might be that you do the work in a false condition, and you will not put your heart and soul in what you are doing, that will affect the delivery definitely. You should be exciting in what you are doing."

Associate managing consultant (India)

High performance in relation to how an individual perceived their work to be interesting or exiting was elaborated by a project manager:

"People also need to feel comfort or enjoy in what they do, if they do not do that, they are probably not high performing."

Project Manager (Sweden)

Cohesion was described as allowing the team to work for a common cause, and was important since most of the tasks had interdependencies. For the virtual team, the level of task cohesion was depending on the tools available. That it was supporting the project working models and processes. Cohesion in the virtual team was supported by a local project manager, as one project manager expressed it:

"During weekly meetings there are sometimes fragmentations between team members, but since we have local PMs in India they have the responsibility to create cohesion offshore. Without a local project manager in India, we would not be able to identify non-verbal cues which would in-turn require greater efforts at team meetings."

Project Manager (Sweden)

In terms of rewards, receiving recognition on performance was more important than receiving increased salary. A few project managers confirmed that although it was important to recognise the performance of the team, it was equally important to recognise on individual performances. One specialist expressed this need:

"When you do something good, it is always good to be recognised for what you have done."

Business analyst (India)

When recognition was sought, the most desirable outcome would be to create recognition inside the organisation, by informing the team and the manager closest to the specialist. The manager would in turn communicate the recognition upwards in the structure to establish a firm and widespread reputation inside the organisation. To maintain a high level of performance, IBM established reward structures that would

benefit those who showed high performance. This was clearly expressed by one project manager:

"If you perform well you will get benefits, if you are just average you will not get anything. Rewards are very important after a successful performance."

Project Manager (Sweden)

The culture at IBM enabled anyone involved in the project to create recognition on other team member's performances. Past distributed recognitions were also used to support the selection of team members in new projects, as one project manager responded:

"The project manager will have the possibility to see these achievements throughout the current project, but also from previous projects, which is used for reusing a team member in another project."

Project Manager (Sweden)

Tracking recognitions on previous achievements in written form was very important to identify high performing virtual team members, and to ensure a composition of a high performing team for future projects. Recognition for specialists was also obtained by getting the opportunity to meet the client and the local face-to-face team onsite, to become what was called a *landed resource*. The specialists were seeing it as gaining a higher satisfaction, and to learn from new experiences.

4.1.4 Job characteristics

Another factor that several specialists emphasised on was the willingness of individuals to enter a collectivistic orientation, to the degree individuals perceived their work to be of importance for others. It was argued that this factor, related to task significance would have a direct impact on the performance of the team, as expressed by one specialist:

"Working as a team and doing things together is very, very important. If you are only going to work individually and not contribute as a team, it will impact on the performance of the team."

Associate managing consultant (India)

Because of the distance it was more challenging for a virtual team to establish an equivalent level of task significance when comparing with the local onsite team. The tasks itself in these global projects were often designed to rely on interdependent work. The findings showed that the on-boarding process, together with having frequent communication between the teams were said to increase the meaningfulness of the tasks to be performed, and would therefore have a positive impact on task significance. This was exemplified by one project manager:

“When working with an offshore team in India it is always good for them to see the big picture, how things matters to others in the onsite team.”

Project Manager (Sweden)

Receiving feedback in connection to work being performed was also a facilitator to increase the perceived meaningfulness of work and performance of a team member. Constructive feedback was linked with performance, like one specialist expressed it:

” The more constructive feedback you get, the better.”

Business analyst (India)

For a few project managers, giving constructive feedback was seen as a facilitator to increase performance rather than just giving positive feedback. It was argued that constructive feedback enabled a project manager to express what could improve in terms of way of working. Specialists perceived positive feedback in terms of guidance if individuals were moving in the right direction. Positive feedback was especially appreciated and increased confidence of team members if it came directly from the customer. The frequency of how often feedback was received reflected a concern for several specialists. Although IBM has a formal feedback procedure, that every 6 month team members receive a formal statement of their performance, spontaneous feedback was highly desirable for several specialists, as one stated:

“If you do something really good, if you achieved something, you feel very good if people come and tell you - you did this very good!, it’s good to hear that. I really like the spontaneous feedback.”

Associate managing consultant (India)

The need for spontaneous feedback was also confirmed by a business analyst, and that formal feedback mechanism alone was not adequate:

“Whenever there is something positive, they should come forward and tell you that and not wait 6 months and give a feedback on a piece of paper, but that is how it is.”

Business Analyst (India)

This view was also shared by a project manager, that it was important to understand the impact of giving feedback to specialists:

”In India for example, if you would complain to their team lead, you do not give any credit, that is really bad for them. So you need to understand that if you have people doing a good job, it is really important that you show that, give good feedback.”

Project Manager (Sweden)

4.1.5 Team processes

This sub-chapter presents four factors contributing to achieve high performance in a hybrid project team. These are related to communication and technology, decision making, trust and trustworthiness, and conflict management.

4.1.5.1 Communication and technology

It was clear that a hybrid project team at IBM was relying on technology to communicate between teams and team members, and that technology enabled individuals to work collectively. It was also argued that communicating with the virtual team over the chat client *Sametime*, was far more efficient than having telephone meetings. The chat client enabled a project manager to confirm that the person on the other side was paying attention when writing back a response to a question:

“The most effective way to reach someone else and make sure that they are paying attention is to use a real time chat. In a conference for example, people could be working while we are having a presentation.”

Project Manager (Sweden)

The chat client also enabled individuals to enhance the social presence of the hybrid project team. Showing emotions by using *emoticons*, the participants could read other people’s feelings. This was used to developing better relationships, and to ease up a negative situation:

“[...] adding a smiley in a chat window, could lighten up a negative situation enormously, compared to just writing the text of what you would like to have done.”

Project Manager (Sweden)

Sending email was primary used when confirming decisions and share other formal information. Email as a communication channel was therefore not used when making decisions, building relationships or when discussing, as a project manager stated:

“[...] people might perceive the email in a different way of what you actually mean. So it is always better to have a direct communication where you can raise issues and things.”

Project Manager (Sweden)

4.1.5.2 Decision making

During weekly meetings, when decision making was on the agenda, the project manager sometimes communicated directly with the virtual team in India. Due to the distance, when visual cues and other senses are limited, making decisions in a hybrid project team was more difficult when communicating with a virtual team from a different culture. A project manager was expected to make all decisions with input from others. Decisions were often made during meetings over telephone conference.

A project manager explained that it was hard to really know if the person on the other side was completely honest on their opinion regarding a decision, or was just expressing oneself to make the project manager satisfied. The same project manager pointed out how to increase the quality of decision making by being more direct, by exemplifying:

"[...] you should go around the table and ask, okay, "You", "what do you think?" "What are the advantages?" If you have two options, you should make a decision, if you feel that people say yes, but they do not believe in it, then okay maybe you should not make a decision at that time. Maybe you need to understand more, or get more information."

Project Manager (Sweden)

Involving other team members in decision making was significant to create commitment to the decisions made. When a decision was made, the project manager needed to communicate this clearly as expressed by one project manager:

"[...] being clear about what you have decided. Quite often you confirm it by using emails or chat. In reality it is quite a democratic process, you are better off to be a leader to make a common decision, together. The team have influence on all decisions taken."

Project Manager (Sweden)

The involvement of decision making was confirmed by an associate managing consultant:

"For me yes, because, maybe my role has something to play with it, my project expertise level and my experience over the years will be the reason for the involvement in decision making."

Associate managing consultant (India)

4.1.5.3 Trust and trustworthiness

Several project managers responded that trust was partly established during the project on-boarding process. In addition, two project managers expressed that during the project, having strong communication and social gatherings outside work will support the development of trust. It was argued that trust was therefore harder to develop with team members that a manager never met face-to-face. It was believed that meeting people will influence one's position in satisfy another:

"[...] it is likely that if you have met someone, you would also like to satisfy that person, since you might have respect for that person. If you only communicate over sametime it is difficult to build trust."

Project Manager (Sweden)

The project manager also mentioned that trust was difficult to develop by just using sametime as a communication channel. This behaviour was related to the working culture at IBM, that a manager was expecting individuals to perform well in order to earn trust, as one project manager responded:

"[...] if they deliver, then I will trust them, because then I know that if I ask for something they will deliver. I need evidence in order to build trust. If someone fails in the beginning the curve goes down and it's steeper to get up again."

Project Manager (Sweden)

It was also argued that in order to gain trust, specialists needed to show honesty when facing problems. This behaviour was confirmed by a specialist:

"[...] trust increases if you manage to learn by asking for help in how to solve it."

Associate managing consultant (India)

Vice versa it was equally important to build trustworthiness as a project manager. It was argued by three project managers that in order to gain trustworthiness as a leader, a project manager needed to show commitment and but also assist the virtual team in personal difficulties and developments outside ones area of responsibility:

"If you as a leader care about other individual's personal issues or development, such as career possibilities [...] you will become a better leader, because they will trust you more when you go beyond in what you need to deliver, showing that you would like them to perform better. The credibility is then built up in a long-term."

Project Manager (Sweden)

4.1.5.4 Conflict management

Several project managers argued that conflict management in a virtual team was more challenging compared to a local face-to-face team. The perception of a conflict was also different and specific to a culture's own point of view. It was also very likely that conflicts never arise in the virtual team, because the culture there prevented them from appearing, since the manager was always right. It was therefore difficult for a project manager to identify conflicts in the virtual team located in India:

"Placing a Swedish manager in India would not help to identify conflicts. I have spent time where I missed conflicts because I cannot read it. "

Project Manager (Sweden)

To address this in the virtual team, the responsibility to manage conflicts was primary entrusted to the local team lead in India, but for the onsite team and the landed resources the responsibility was assigned to the project manager in Sweden. Managing conflicts and to know when to intervene and not was critical in a hybrid project team. One project manager emphasised this:

“Managing conflicts in the right way is therefore a key factor to achieve high performance in virtual teams.”

Project Manager (Sweden)

A project manager therefore needed to be aware of the implications but also the difficulties when communicating directly with the virtual team, since the hierarchy in India was different compared to the Swedish way of working. According to the Indian culture a project manager would be stepping over the area of responsibility of a team leader in India when communicating directly with the members in the virtual team. In some cases this was necessary in order to get critical input directly from the virtual team.

4.1.6 Team leadership

A factor that was critical to high performance was to the degree adaptations were made in leadership, by choosing a suitable leadership style that would be appropriate in specific phases of the project. It was argued that individuals were often in different stages of maturity in their current role, which determined the type of leadership that was necessary to exercise for high performance. The complexity of choosing the right leadership style also increased when cultural differences appeared in a hybrid project team. This was clearly expressed by one of the project managers:

“[...] sometimes you need to adopt certain leadership styles when there is something that has a specific deadline, or because people are different, because of cultures for example.”

Project Manager (Sweden)

4.1.7 Concluding summary of the sub-chapter

From the findings it can be concluded that a high performing hybrid project team is able to communicate clear goals and a contextual understanding that a virtual team is able to share. A high performing hybrid project team is also able to understand and adapt to cultural differences. Further, it seems that satisfying individual needs in a virtual team also contributes in high performance for the hybrid project team. A high performing hybrid project team also care about other team member's work and the outcome of their contribution in relation to the team as a whole. Receiving feedback more frequently also seems to increase performance. Increased performance also seems to be achieved when virtual team members are communicating with the local team with technology that enables a stronger social presence and sharing of emotions. To enable high performance in decision making, a project manager would involve specialists to engage more actively in discussions. To enable high performance a project manager also need to build trustworthiness by showing commitment towards the virtual team. Even if this requires a project manager to step over another team leads area of responsibility. A project manager will also need to care about both virtual and local team members individually, and not only a hybrid project team as a whole. A high performing hybrid project team is utilising other team members to

identify conflicts in a distant virtual team. A project manager in a high performing hybrid project team is also able to exercise different types of leadership styles depending on individual needs and what is required in a specific phase of a project.

4.2 The strategies to achieve high performance in a hybrid project team

This chapter concludes the strategies to achieve high performance in a hybrid project team, based on the findings from the previous sub-chapter together with additional data from the interviews. As previously shown, specialists from India and project managers from Sweden emphasised that meeting people face-to-face, at least in the initial phase of a project, increased the understanding of the context including clear goals, expectations and how work is shared. In addition, the on-boarding process facilitated in getting the clients culture into the project, had a positive impact on task significance and the establishment of trust. Further, for the virtual team members, the process created an opportunity to meet people informally, socialise and develop relationships and establish accountability which was related to later in the project when the team was physically separated.

In more detail it was important to communicate escalation levels by preparing formal routines to manage different levels of severity on possible future events, what needs to be done at a certain point and who is responsible to take action on each level. In addition, to ensure that no matter what happened along the way, the project manager would have a written *report* on the progress every week.

To increase the likelihood of delivering on time, within costs, and at a certain quality, project planning was an important step in the initial phase of the project to measure how long each task would take in order to get them completed. The IBM way of doing this was first to make a top-down calculation with the project managers, and then detailed adjustments in a bottom-up calculation from the expertise of specialists. A project manager concluded why this was necessary:

"This is our way of estimating the progress, and follow up on measurement which is being conducted on weekly basis. We have a scoreboard telling how many percentage of the final outcome we reached. "

Project Manager (Sweden)

The project goals were actively being measured during a project life-cycle. Tracking and estimating the progress was important to know how close to the targets the hybrid project team was. IBM is using a strategy called the seven keys of success. This strategy or tool is used to measure the progress of the project, and how successful a team is in achieving seven objectives. Each objective can be red, yellow or green, where green means that the objective is fully achieved. The written *report* mentioned earlier was obtained from a team member responsible for a specific objective as input for the seven keys of success. For the tool to be reliable, it was emphasised that the content must be consistent with reality:

"You also have to ensure that the content in the report is reflecting the reality, must be controlled in some way so you can follow the productivity."

Project Manager (Sweden)

In summary, the seven keys of success measures if *stakeholders are committed, business benefits are being realized, work and schedule are being predictable, scope is realistic and managed, team is high performing, risks are being mitigated, and if the delivery organization benefits are being realized*. It was noted from one of the interviews that the fifth key called *team is high performing*, is achieved when *breadth, depth and caliber of project manager and team skills are appropriate for all phases. Morale, motivation, energy and collaboration across teams are high. Environment and facilities support productive and effective teamwork. Roles and responsibilities are clear*. Signs of low team performance were typically that, tension can be felt, turnover is high and working conditions are poor.

One project manager concluded some reflections in relation to high performance, if the team was successful in reaching green in all seven areas. By developing a question the project manager stated:

"Was the success achieved because the project manager used a guiding leadership behaviour to reach the goals, or by using a supporting leadership style? Or both?"

Project Manager (Sweden)

The emphasis was that a project manager needed to adapt different leadership styles to achieve high performance. The guiding leadership behaviour was required if there was a short time line or if an objective had failed before, or if the team just needed to deliver. It was also elaborated that if the project was ending and a hybrid project team were able to solve any conflicts or challenges, and members felt belongingness to the team, they were probably high performing. The same project manager emphasised this by stating:

"A high performing team is when [...] you will walk the extra mile because we want to reach the goal, together."

Project Manager (Sweden)

Another strategy identified was how to ensure a high rate of successful delivery. One project manager emphasised that when working with a different culture in the global delivery India programme, small deliverables were found to increase the success rate of deliverables. It was argued that the culture in India made it difficult for virtual team members to be completely honest if a delivery was not going to be completed on time. It was concluded that relying on small deliverables together with having communication more frequently increased the success rate of deliverables in projects involving the global delivery India programme. The project manager concluded this by stating:

"[...] my experience from India is that you have to split it up, all deliverables."

Project Manager (Sweden)

From the previous findings it was also clear that the development of a cultural awareness facilitated in the understanding of behaviours in other cultures, and consequently increased the quality of communication between team members. IBM provides a strategy to increase cultural awareness called cultural training. This training was entitled to virtual team leads, and specialists from India who travelled and became a *landed resource*. Cultural training was typically communicated before the specialists travelled to the country where the client and the onsite team were located. This was described by a project manager:

"They receive a package about cultural training, information about the client, which is set up through India."

Project Manager (Sweden)

As a final strategy, it can be concluded that several specialists had a desire to receive feedback more frequently on their performances. One project manager expressed that constructive feedback can assist a specialist in changing the way of working. It can then be assumed that receiving constructive feedback more frequently could have a positive impact on performance, to adapt faster to performance depending changes. The importance of receiving additional constructive feedback was exemplified by one specialist:

" The more constructive feedback you get, the better."

Business analyst (India)

The reception of positive feedback was seen as a confirmation if individuals were moving in the right direction. Positive feedback was especially appreciated and increased confidence of team members if it came from the customer. The impact of communicating positive feedback from the customer was also confirmed by a project manager:

"If you get feedback from the client, and the client is satisfied, and you communicate this to the team they will think, we did a good job."

Project Manager (Sweden)

Similar to constructive feedback there was a need to receive positive feedback more frequently, and that a formal feedback mechanism alone was not adequate:

"Whenever there is something positive, they should come forward and tell you that and not wait 6 months and give a feedback on a piece of paper."

Business analyst (India)

From the findings it is unclear if receiving positive feedback more frequently could improve performance but it can certainly increase satisfaction and knowledge if a team member is moving in the right direction. Encouraging hybrid project team members to use both formal and informal channels to communicate feedback could be seen as a possible strategy to achieve high performance.

4.2.1 Concluding summary of the sub-chapter

The first strategy emphasised that having an initial meeting face-to-face in the early phase of a project, increased the understanding of the context including clear goals, expectations and how work is shared. In addition, the on-boarding process facilitated in getting the clients culture into the project, had a positive impact on task significance and the establishment of trust. Further, for the virtual team members, the process created an opportunity to meet people informally, socialise and develop relationships and establish accountability which was related to later in the project when the team was physically separated.

The second strategy emphasised that it was important to estimate how long each task would take, to be able to deliver on time, within budget and at a certain quality. The process started by first making a top-down calculation together with all the project managers. The next step was to involve the specialists and make more detailed adjustments in a bottom-up calculation by utilising their area of expertise. The information was then used to follow up on weekly measurements.

The third strategy emphasised the importance of having a process to manage measurements of the progress in relation to predefined objectives. To make this strategy reliable it was important that the input data was reflecting reality.

The fourth strategy emphasised the importance that high performance was achieved by adapting the leadership style to different phases in the project. It was argued that project managers needed to exercise both guiding and supporting leadership styles in a hybrid project team. In a leadership perspective, a high performing team was characterised by solving any challenges, had a strong belongingness and was willing to walk an extra mile to reach the intended goals.

The fifth strategy was related to ensuring a high rate of successful delivery in the global delivery India programme. Because of cultural differences when working with a virtual team in India, it was more difficult according to the Swedish culture to complete goals on time. Relying on small deliverables together with having communication more frequently increased the success rate of deliverables in projects involving the global delivery India programme.

The sixth strategy emphasised that cultural training is a strategy to communicate cultural awareness. Team members will need this training to increase quality of communication, and taught before they travel to the client or local team having a different culture from their own.

The eleventh strategy emphasised that receiving feedback more frequently could have a positive impact on performance, and more likely when receiving constructive

feedback. Receiving positive feedback more frequently would however increase satisfaction and self-confidence of team members. Encouraging hybrid project team members to use both formal and informal channels to communicate feedback could be seen as a possible strategy to achieve high performance.

5 Discussion

In this chapter the author analysed the findings in connection with the theoretical framework. The chapter consists of two sub-chapters, what defines a high performing hybrid project team, and the strategies for achieving high performance in a hybrid project team.

5.1 Towards a definition of high performance

This sub-chapter analyses the findings and the main factors contributing to high performance, and ends with a concluding definition of high performance. The sub-chapter follows the structure based on the theoretical framework.

5.1.1 Purpose and context

From the findings it was clear that work performed in a hybrid project team is typically cross-functional, interdependent, and stretches over international and cultural boundaries. Having clear goals has shown to be critical for high performance in this complex environment where cross-functional collaboration is prominent (Shani, 2009; Dyer and Dyer, 2013). The findings also revealed that it was more challenging to obtain a shared contextual understanding for a virtual team in India, and it was generally stronger in the face-to-face team, which is consistent with Purvanova and Bono (2009). If the virtual team back in India would not obtain a shared contextual understanding, or having a different perception of the tasks to be performed, the two teams would also have different expectations on one another (Hinds and Bailey, 2003). Establishing a shared contextual understanding has shown to be critical for high performance by minimizing misconceptions involved in performing cross-functional team work. IBM communicated clear goals and a shared contextual understanding by having an on-boarding process, where team leaders and project managers met to discuss the context and expectations of the project. During changes in requirements, and if an objective was not clearly understood, team leaders also travelled to the country where the local team and client was located to grasp a more complete picture of the objectives to be performed. The travel also facilitated in building a shared contextual understanding when the team leader returned and communicated the new insights to the virtual team back in India.

5.1.2 Team composition

The findings show that the composition of a high performing hybrid project team is dynamic, and expertise is generally brought in when needed. A high performing hybrid project team is composed by individuals matching the needs of the project. In addition to fundamental requirements such as educational background and skills, accomplishments from past projects and a developed cultural awareness were the main attributes to consider when composing a high performing hybrid project team. When the landed resources from India joined the Swedish face-to-face team, a multicultural team was established (Lisak and Erez, 2009). Without a developed cultural awareness, their social behaviours and the perception of the work will be different (Hofstede et al., 2010; Rinuastuti et al., 2014), and are likely to face barriers in how they communicate with people from other cultures (Butler and Zander, 2010).

The challenge to achieve cultural awareness in the face-to-face team would therefore be to understand why these individuals behave differently (Peterson, 2004). Before Indian specialists travelled to Sweden, and became landed resources and stayed for a longer period of time, IBM offered cultural training to initiate the process of developing a cultural awareness. Once on the site, these team members continued with an on-the-job cultural training and were also required to adapt to the new culture. The challenge with adapting to a deal-focused culture in Sweden, would be to accept that sincerity is seen as being open, direct and honest without the need to first build a relationship with an individual (Gesteland, 2012). In contrast, the view from the Indian relationship-focused culture is to help out, even if one cannot complete the favour. This cultural clash was shown, according to project managers in Sweden to be challenging for the Indian culture.

5.1.3 Team motivation and cohesion

The findings showed that high performing specialists were typically achievement focused, and had a desire for challenging work that provided maximum learning by having a role where one could go beyond their area of responsibilities. For work performed, receiving recognition was more important than having an increased salary. Challenging tasks are recognized in the achievement need by McClelland (Lee, 2013). A project manager can facilitate this need by opening up for own initiative taking that is beyond one's role (Lee, 2013), and designing tasks with skill variety and emphasis on autonomy (Ali et al., 2014). The desired outcome was to establish recognition inside the organisation, within the team and inform the manager on individual achievements. Tracking recognitions on previous achievements in written form was very important to identify high performing virtual team members, and to ensure a composition of a high performing team for future projects. The degree of effort in satisfying individual needs has shown to have a direct impact on the triple constraint of project success (Peterson, 2007). Project managers in Sweden addressed this by caring for the individuals in the team. This is consistent with Lee (2013), by acting beyond of what is expected in the role of a project manager, in terms of supporting individual needs, such as career development and the creation of recognition inside the team. The Indian collectivistic culture is linked with the affiliation need, which means that specialists will be motivated to work at a higher performance if they feel that they are part of a team (Hofstede et al., 2010; Lee, 2013). Landed resources in Sweden will also have the possibility to contribute in creating a supportive team environment (Peterson, 2007), to balance out the typical individualistic culture. The findings also show that IBM is using a team lead when virtual teams exceed a specific number of individuals, and to create stronger team cohesion. In relation to cohesion, Lencioni (2002) argue that in order to create strong cohesiveness, the team needs to overcome the need for invulnerability, by being open about one's own weaknesses. Failing to overcome invulnerability can consequently affect the trust in the team. It is therefore critical in a hybrid project team to be open about weaknesses and issues one cannot manage even if it contradicts the culture of the individual. The local team lead, who obtained the responsibility to overcome communication issues due to time differences, and follow up on deliverables, would manage the virtual team in accordance to the dimensions of the Indian culture. This approach will consequently make the virtual team less aware of the culture of the client and the team in Sweden, since the cultural awareness is managed by the local team lead. It can be concluded

that the development of cultural awareness is therefore limited to those who are in direct contact with another culture. That the local team lead is limiting the need for cultural awareness, and is a facilitator of trust and cohesion between the virtual team and the face-to-face team. The findings also indicated that the IBM on-boarding process facilitated to some degree in bringing the culture into the project.

5.1.4 Task significance and feedback

The findings indicated that there was a link between a collectivistic behaviour and task significance. The findings also linked task significance with the actual performance of the team. Communicating task significance can therefore increase the degree the individual perceives the task to be of importance for other people (Ali et al., 2014), a collectivistic behaviour and the performance of the team. According to the findings, it was apparent that the level of feedback received on work performed was linked with satisfaction and work performance. Receiving constructive feedback increased work performance and receiving positive feedback increased satisfaction and confidence of the team members. The frequency on how often feedback was received caused a concern for some specialists, and stated a need to receive feedback more frequently. The desire to receive feedback more frequently has shown in a previous study to increase performance, and any delay to cause a decrease in performance (Kettle and Häubl, 2010). It can therefore be concluded that a hybrid project team will need frequent feedback mechanisms in order to enable high performance. In a virtual team in India a Swedish project manager can encourage team members to give feedback to other members closer to the virtual team, such as the local team leader in India (Kahai et. al., 2012).

5.1.5 Team processes

A high performing hybrid project team is relying on technology to perform work collectively and to communicate. During a project's lifecycle, it was common that IBM used technology in order to update on the shared contextual understanding (Hinds and Bailey, 2003). A synchronous communication tool such as a chat client enabled the hybrid project team to perform direct communication without any delay. A chat client having the feature to send emotional icons could also strengthen the social presence of the hybrid project team (Bringas, 2008). An asynchronous communication tool such as email was primary used to send out official confirmations, and not used to build relationships or discuss project content. It can be concluded that the chat client as communication tool facilitated in improving relationships within a hybrid project team (Clemons and Kroth, 2010), but also affected how communication was conducted for the face-to-face team (Shani, 2009).

To ensure high performance, a project manager would need to communicate directly with all team members in a hybrid project team, including virtual team members. To increase quality and commitment to decisions made when involving virtual teams, project managers were required to receive input from individual team members. This approach in decision making will foster a creative environment (Shani, 2009), and will also gain support from the team members later in the project (Peterson, 2007). Decisions were often made during meetings, and it appeared to sometimes be difficult to really know if members in a virtual team were sincere about their opinion. It was

not clear why this happened, but relating this situation to the cultural dimensions of Hofstede et al. (2010) can explain the behaviour to some extent. Since team members in an Indian virtual team have low exposure to the Swedish culture and are more familiar with the Indian culture with hierarchical structures were a managers decision is not to be questioned, and only accepted.

The findings show that trust was partly enhanced during the on-boarding process. Trust was built up in a long-term, by communicating frequently and by having social gatherings. Trust was harder to develop between a project manager and its team members when they never met face-to-face. From the project manager's point of view, trust of any virtual team members was primarily built by showing sincerity and deliver on time. In the Indian relationship-focused culture individuals tend to build trust by establishing strong relationships. A project manager can therefore facilitate the process of building trust by adapting and being relationship focused (Murphy and Kambara, 2014). This would also require the project manager to invest more time into projects that involve virtual teams (Dyer and Dyer, 2013). Trustworthiness as a leader was built up by showing commitment and but also assist the virtual team in personal difficulties and developments outside one's area of responsibility, which is supported by Häkkinen and Savolainen (2011) that trust is developed by showing credibility towards others.

5.1.6 Team leadership

Since individuals from the Indian culture tend to be relationship focused and emotional attached to their work (Hofstede et al., 2010), project managers are more likely to be successful by developing an emotional intelligence as a leader (Gardner and Stough, 2002; Salovey and Mayer, 1990). Several project managers pointed out that the adoption of different leadership styles is necessary in a hybrid project team to maintain high performance. This type of leadership approach is most fitting for situational leadership, which argues that there is no single leadership style that can be applied for all situations (Lee-Kelley, 2002; McCleskey, 2014). In a typical multi-cultural hybrid project team, members are motivated through different means. Individuals may also be in different stages of maturity in their current role, which will affect their need for guidance. During a project life-cycle, project members are likely to encounter a variety of challenges that will drive or prevent the work to move forward. A typical scenario for the leader was the choice of either encouraging team members by being relationship-focused or switch to the need of reaching a specific deadline by being task-focused. Successful leaders are able to make this switch (McCleskey, 2014). Project managers at IBM were able to comprehend the Indian culture, and attain different leadership approaches to both cultures. When communicating with the virtual team, project managers would heighten the follower's self-efficacy by entrusting them in decision making, modifying their behaviour, which is a sign of practicing transformational leadership (Huang et al., 2010). Further, the on-boarding process and the unity when landed resources integrated and socialized with the onsite team also showed signs of creating a collective identity among followers. These steps, confirms that transformational leadership is highly efficient in a hybrid project team, to strengthen a leader's position and the satisfaction in the team (Purvanova and Bono, 2009).

5.1.7 Concluding factors to define high performance

It can be concluded that a high performing hybrid project team is communicating clear goals and a shared contextual understanding to both virtual and face-to-face team members early to enhance performance and minimize any misconceptions later in the project. A high performing hybrid project team is composed by individuals that have undergone cultural training to develop a cultural awareness, and have accepted the behaviour of the new culture they are working in. A high performing hybrid project team is also composed by achievement focused individuals, where roles are designed to satisfy individual's own needs by having an increased responsibility and learning challenges. A high performing hybrid project team is collectively establishing recognition inside the organisation and in the team. A high performing hybrid project team has developed an awareness of task significance that will consequently increase collectivistic work behaviour. A high performing hybrid project team receives constructive feedback frequently from the project manager or any other team member in order to maintain high performance. Communication channels in a high performing hybrid project team are synchronous, where delay in responses is kept to minimal, and enables social interaction and development of relationship with any team member in a virtual or face-to-face team. Because of the involvement of team members in decision making, the environment in a high performing hybrid project team is also creative. Trust in a high performing hybrid project team is strong, since project members are sincere about facing problems during the project life-cycle. A project manager in a high performing hybrid project team is gaining trustworthiness by being relationship-focused, and assists in personal developments outside one's own role. A project manager in a high performing hybrid project team is able to sense and switch to different leadership styles depending on individual needs and what is required in a specific phase of a project.

From the above conclusion, a definition can be derived:

The concept of high performance in a hybrid project team is related to a group of factors impacting on team performance, and is distinguished by having processes that will support any team member to surmount any barriers in achieving the team's goals.

From the above definition, it can be concluded that a successful project delivery will be depending on if the goals of the hybrid project team are consistent with the goals of the project deliverables.

5.2 Strategies towards high performance

According to the findings it can be concluded that there are different types of strategies that will achieve different types of outcomes, and in common they are all relevant for hybrid project teams. Several processes identified can be related to project management and some are rarely or not confirmed at all by the current virtual team literature. The strategies are consequently structured in accordance to their relevance in project management process strategies and leadership strategies. The chapter also concludes the frequency of occurrences and relatedness to current virtual team and face-to-face literature.

5.2.1 Project management process strategies

The strategy called *the on-boarding process* is closely related to virtual team literature, that an introductory face-to-face meeting will facilitate the communication of clear goals, the context, and the development of trust (Gibson & Cohen, 2003). In the on-boarding process it was clear that factors contributing to high performance were in focus, such as sharing knowledge about cultures, goals, task significance and the establishment of trust. The process also created an opportunity for the virtual team in India to meet people from the local face-to-face team in Sweden. This helped the hybrid project team to build relationships across the two teams, to feel that everyone was part of something greater than the effort of each team. It was also argued that any relationship created would unconsciously create accountability. The knowledge obtained from the on-boarding process was also related to later in the project when the teams were physically separated. Since the on-boarding process would bring the two teams closer together, the expected outcome would be a stronger cohesiveness in the hybrid project team as a whole (Salisbury et al., 2006). Having a strong cohesiveness can generate several positive outcomes, for a hybrid project team, cohesiveness can facilitate in reaching goals more efficiently and members also tend to show less anxiety and have a higher self-esteem (Shani, 2009).

A strategy to ensure high performance emphasised that it was important to estimate how long each task would take, to be able to deliver on time, within budget and at a certain quality. Since this process involves a work breakdown structure and to some degree, decision making, it will be called *the consensus planning process*. The planning process started by first making a top-down calculation of all the tasks together with all the project managers. The next step was to involve the specialists and make more detailed adjustments in a bottom-up calculation by utilising their area of expertise. According to the literature, involving specialists in the planning process are likely to induce an increased motivation to put forth additional efforts later in their work performance (Shani, 2009). The involvement will also make specialists more committed to decisions made (Peterson, 2007), and reach a level of consensus that team members have accepted on the basis of logic and feasibility (Shani, 2009). The data generated in the consensus planning process will then be used to follow up on weekly measurements. Since the consensus planning process facilitates the creation of clear goals, it can be considered to be closely related to the achievement of clear goals as found in virtual team literature (Gibson & Cohen, 2003; Verburg et al., 2013). Clear goals are also confirmed to be of importance in the face-to-face team literature (Shani, 2009; Dyer and Dyer, 2013).

Another strategy emphasised the importance of having a process to manage continuous performance measurements of the progress in relation to predefined objectives. To make this strategy *reliable* it was critical that the weekly input data from the hybrid project team was reflecting reality, to ensure a truthful time estimation of deliverables. This strategy will be called obtaining *reliable measurable data*. It was argued that cultural differences could cause the data to be inaccurate, since sincerity had a different meaning depending on the culture (Gesteland, 2012). Whether team members are aware of the cultural norms they operate in, and adapt accordingly will therefore play an important role in increasing the reliability of the

weekly measurement on project performance. Equivalents to continuous performance measurements or reliable measurable data have not been identified, or are less frequent in the current virtual team literature, and are more common in face-to-face team literature (Shani, 2009).

A strategy that are likely to impact on *reliable measureable data*, emphasised that receiving feedback more frequently could have a positive impact on performance, and more likely when receiving constructive feedback. This strategy is called *frequent feedback mechanisms*. Receiving feedback more frequently has been shown in face-to-face team literature to increase performance, and any delay to cause a decrease in performance (Kettle and Häubl, 2010). Receiving positive feedback more frequently would however increase satisfaction and self-confidence of team members. Another study claims that having well-functioning feedback mechanisms inside an organisation has shown positive outcomes on team satisfaction, cohesion, consensus and efficiency (Kahai et. al., 2012). It can therefore be concluded that a hybrid project team will need frequent feedback mechanisms in order to enable high performance. Encouraging hybrid project team members to use both formal and informal channels to communicate feedback could be seen as a facilitator to achieve this strategy, and high performance.

Another strategy was related to ensuring a high rate of successful delivery in the global delivery India programme. Because of cultural differences when working with a virtual team in India, it was more difficult according to the Swedish culture to complete goals on time. Relying on small deliverables together with having communication more frequently increased the success rate of deliverables in projects involving the global delivery India programme. This strategy will be called *the application of small deliverables* and will impact on the triple constraint of the project success factors, to deliver on time, within budget and at a high quality. An equivalent to *application of small deliverables* has not been identified, or is less frequent in the current virtual and face-to-face team literature.

5.2.2 Leadership strategies

A strategy in a leadership perspective emphasised the importance that high performance was achieved by adapting a specific leadership style depending on the different phases or events in the project. This strategy will be called an *adaptive leadership*. An equivalent to this strategy called situational leadership has been confirmed to be effective in both face-to-face (McCleskey, 2014) and virtual team literature (Lee-Kelley, 2002; Lee, 2013). In the findings it was argued that project managers needed to exercise both guiding and supporting leadership styles in a hybrid project team. In the literature it was found that depending on the culture and maturity, individuals are likely to be motivated differently (Lee-Kelley, 2002; McCleskey, 2014), which confirms the need for an adaptive leadership strategy in a hybrid project team. During a project life-cycle, project members are likely to encounter a variety of challenges that will drive or prevent the work to move forward. From a leadership perspective, the most desirable outcome was achieved when the team solved any challenges, had a strong belongingness and was willing to walk an extra mile to reach the intended goals.

Another strategy emphasised that cultural training is a process to communicate cultural awareness. Team members will need this training to increase quality of communication, and be taught before they travel to the client or a local face-to-face team having a different culture from their own. This strategy will be called *cultural training*. For a virtual team, obtaining a cultural awareness could have a positive effect on the strategy *application of small deliverables*, to increase the success rate of deliverables even more. Cultural awareness in a team will also foster team cohesion, social integration (Auyko and Härtel, 2006), and thereby increase the performance (Lisak and Erez, 2009). The importance of developing a cultural awareness is confirmed by virtual team literature (Auyko and Härtel, 2006), and since virtual teams are common in hybrid project teams, it will consequently affect the performance of a hybrid project team.

5.2.3 Concluding summary of strategies

It can be concluded that combining the project management process strategies, and the leadership strategies will encapsulate several performance depending factors and realize the potential of achieving a higher hybrid project team performance. While the literature confirms the effectiveness for some of the strategies, additional strategies were also found that contributes to new knowledge in achieving high performance in hybrid project team research.

6 Conclusion

The aim of this study was to determine the meaning of high performance within a hybrid project team operating in an international setting, and how project managers can govern these team members to achieve high performance. The author justified an explorative study since there was a gap in current literature on the definition of *high performance in a hybrid project team*. To bridge the gap in literature, the author developed three research questions, in the following order:

- (1) *What are the factors affecting performance in a hybrid project team?*
- (2) *What defines a high performing hybrid project team?*
- (3) *What are the strategies for achieving high performance in hybrid project team?*

6.1 What are the factors affecting performance in a hybrid project team?

This research question was answered by looking into current literature on virtual and face-to-face team performance and by investigating the *factors that affect performance in a hybrid project*. In the current literature, there were several factors affecting performance in both face-to-face and virtual teams, which are the following factors. Purpose and context, team composition, team motivation- cohesion and rewards, job characteristics, team processes and team leadership.

6.2 What defines a high performing hybrid project team?

In the literature, *high performance* has hardly been discussed or studied in hybrid project teams. Therefore, to answer this research question, a case study was conducted in a high performing organisation that utilises hybrid project teams. From the findings, it was acknowledged that high performance is related to how well the team is operating in relation to the factors having an impact on performance. The following definition was derived from the concluding discussion chapter:

The concept of high performance in a hybrid project team is related to a group of factors impacting on team performance, and is distinguished by having processes that will support any team member to surmount any barriers in achieving the team's goals.

6.3 What are the strategies for achieving high performance in a hybrid project team?

To answer this research question the *strategies* were concluded with input from the factors having an impact on high performance and explicit findings related to strategies that will assist a project manager to govern a hybrid project team and achieve high performance. In the discussion chapter, the strategies were organised into two main areas depending on their relevance to project management process strategies and leadership strategies.

It was concluded that combining the project management process strategies, and the leadership strategies will encapsulate several performance depending factors and realize the potential of achieving a higher hybrid project team performance. While the literature confirms the effectiveness for some of the strategies, additional strategies were also found that contributes to new knowledge in achieving high performance in hybrid project team research.

To successfully govern a hybrid project team to achieve high performance seven strategies related to project management processes and leadership were concluded from the findings. *The on-boarding process* will enable a strong cohesiveness by having an initial meeting. *The consensus planning process* will ensure a reliable time estimation of deliverables. *Reliable measureable data* emphasises the importance that input data to measure project performance is reflecting reality. *Frequent feedback mechanisms* emphasises that high performance is achieved when using both formal and informal channels to communicate feedback more frequently. *The application of small deliverables* ensures a higher rate of successful delivery. *Adaptive leadership* emphasises that a project manager will need to exercise both guiding and supporting leadership styles to achieve high performance. *The cultural training* will increase the cultural awareness and consequently the quality of communication, cohesion and performance in the team.

6.4 Limitations and suggestions for future research

This research has primarily studied the relationship between Swedish project managers and Indian specialists, and has consequently limited the research outcome and generalizability to a context related to these two cultures. Some single occurrences were kept in the findings chapter to construct a more complete and coherent findings chapter. The cause of single occurrences can be linked to the limited sample size of this research or a limited work experience of the participants. However, the interview data was comprehensive and provided strong evidence and several insights to construct the data analysis. The short time allocated for this research limited the comprehensiveness of the outcome from the final research question regarding the strategies to achieve high performance. A factor that increased the complexity, but also the reliability was the decision in investigating both the perception of project managers and project members, to validate the findings by obtaining both views. Since there is an increasing demand to collaborate in an international setting, the outcome of this research will contribute to the knowledge base of project management by identifying factors that are critical in achieving high performance in a hybrid project team.

When looking into the strategies to achieve high performance in a hybrid project team there are several strategies concluded. Since these strategies are concluded from a real case in combination with theoretical reasoning, the reliability of their effectiveness is considered to be high but additional research could be made in order to develop these strategies further. This research did not consider the personal needs of a project manager. Since a project manager is affecting the performance of a hybrid project team, and the role is often the highest step in the career ladder, further research could be needed to identify the factors that will increase the performance and satisfy personal needs of a project manager.

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8 Appendices

This section contains all the appendices in the report.

8.1 Appendix A: Interview guide

Appendix A contains two interview guides, one for project managers and one for Indian Specialists.

8.1.1 Project managers from Sweden (semi-structured)

Personal data

Name:

Years in the company:

Project management experience:

Main questions

1. What are the areas of responsibility in your role?
2. How much experience do you have in leading different types of project teams?
 - a. Face-to-Face Teams
 - b. Virtual Teams
 - c. Hybrid Teams (a+b)
3. What would you consider are the opportunities of leading a virtual team in a hybrid project team?
 - a. Culture?
 - b. Expertise?
 - c. Is it more efficient?
4. What would you consider are the challenges of leading a hybrid project team?
 - a. When communicating across cultural boundaries?
 - b. When building trust? (*in the team*)
 - c. When making decisions?
 - d. When developing credibility? (*trustworthiness as a leader*)
 - e. When developing relationships? (*in the team*)
 - f. When creating cohesion in the team? (*team cohesion is about maintaining the team bonding effect and preventing group fragmentation.*)
 - g. When encouraging collaboration? (*in the team*)
 - i. Rewards?
 - ii. Feedback?
 - h. When managing conflicts? (*in the team*)
 - i. When coordinating interdependent tasks?
 - j. When arranging meetings?

5. If you perceive any challenges mentioned above, what actions do you take to overcome these?
 - a. Can you give examples?
 - b. Are there other ways to support these, such as *cultural training*?
6. How would you define “high performance” in a hybrid project team?
7. What strategies and key actions do you apply to maintain high performance?
 - a. Can you give examples?
8. How do you measure/monitor the performance of the team?
 - a. When?
 - b. To whom?
 - c. Can you give examples of methods?
9. How could members in a hybrid project team support high performance?
 - a. What would be a qualified team member?

8.1.2 Project team members from India (semi-structured)

Personal data

Name:

Current position:

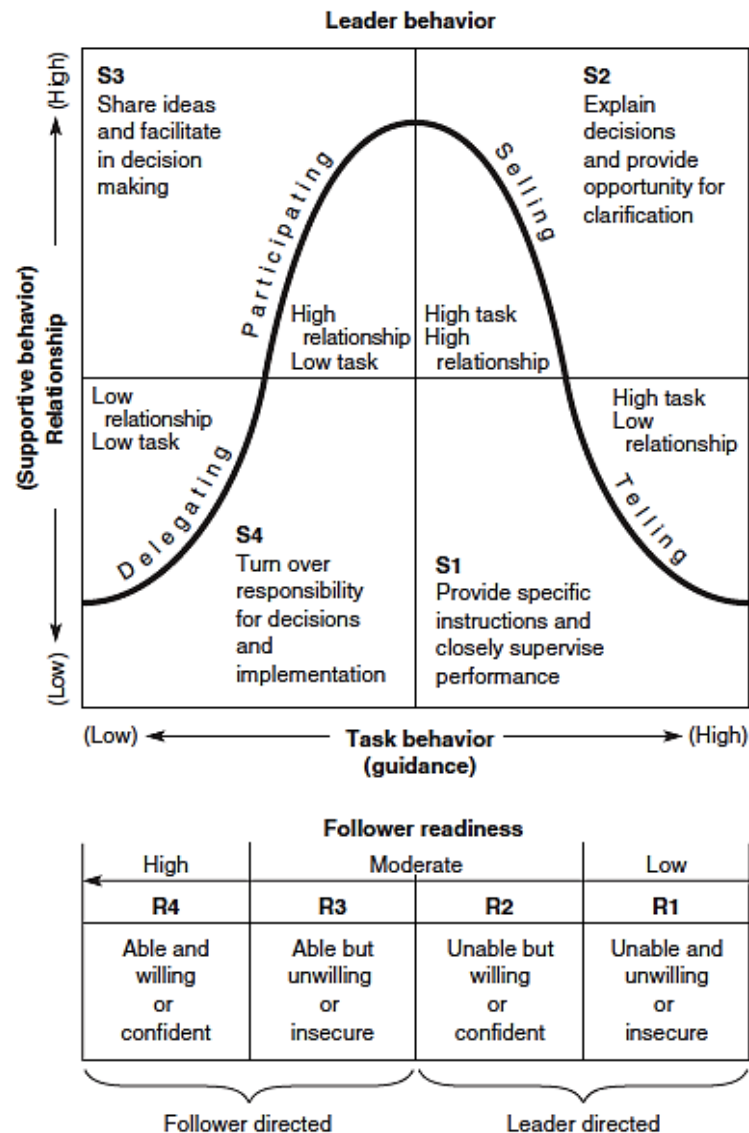
Years in the company:

Main questions

1. What are the areas of responsibility in your role?
2. How much experience do you have of working in different types of project teams?
 - a. Face-to-Face Teams
 - b. Virtual Teams
 - c. Hybrid Teams (a+b)
3. What would you consider are the opportunities of working in a hybrid project team?
4. When engaging in a project, do you perceive a clear process on how you will collaborate with other team members on common/shared tasks?
 - a. How does this process work?
5. Do you believe it is important to have a strong cohesion/relatedness in a hybrid project team? (*cohesion is the attractiveness of being part of the team and bonding effect that prevents group fragmentation*)
 - a. If so, why?
6. Are you satisfied with how your personal relationship with other team members is developing during a project life-cycle?
 - a. If yes, when is it developing?
 - b. If no, why?
 - c. Does this usually change when the project is progressing? If so, can you please describe how it changes over time?
7. Do you feel that current communication channels/tools are sufficient to establish trust and credibility to other members in a hybrid project team?
 - a. In a virtual team, is there any difference from meeting people face-to-face?
 - b. Why?
8. Do you get the opportunity to influence on decision-making?
 - a. If yes, in what areas?
9. Do you believe that you receive the appropriate training and mentoring to perform your tasks?
 - a. How?

- b. When?
 - c. In a virtual team? (*such as cultural training*)
10. Do you receive recognition or feedback on your performance on regular basis?
- a. How?
 - b. When?
 - c. By whom?
 - d. Is this helpful? (*please explain*)
11. Do you receive guidance on how to perform better in a hybrid project team?
- a. How?
 - b. When?
 - c. By whom?
 - d. Is this helpful? (*please explain*)
12. What is most important for you when you accept to work for a specific project?
- a. What would be your own needs? (*to become motivated*)

8.2 Appendix B: Orientation of situational leadership



Situational leadership theory, adapted from Shani (2009)

S1: If followers are unable, unwilling or feel insecure to perform a task, a leader can adopt a high-task and low-relationship approach.

S2: If followers are unable but willing and confident to perform a task, a leader can adopt a high-task and high-relationship approach.

S3: If followers are able, but unwilling and feel insecure to perform a task, a leader can adopt a low-task and high-relationship approach.

S4: If followers are able, willing and feel confident to perform a task, a leader can adopt a low-task and low-relationship approach.

8.3 Appendix C: The consensus process

- a. Avoid arguing for your own position, listen carefully on others before pressing your own point.
- b. Avoid thinking in terms of win or lose, look for the most acceptable alternative for all parties involved.
- c. Do not avoid conflicts, be suspicious when agreement seems to come too easily, ensure that everyone accepts the solution.
- d. Avoid conflict-reducing methods, such as majority vote. If a dissenting member finally agrees, do not engage in rewarding that individual on a later point.
- e. Be open for different opinions and try to involve everyone in the decision process. Disagreements can help the team in finding a better solution.

Exercising the consensus process, adapted from Shani (2009)

The level of consensus in a team can be measured according to table 4. Consensus is achieved at level 1-4, on the scale from 1-6.

Level	Description
1	I am enthusiastic about this alternative. I am satisfied that the decision is an expression of the wisdom of the team.
2	I find the decision is the best choice. It is the best of the real options that we have available to us.
3	I can live with the decision. I'm not especially enthusiastic about it.
4	I do not fully agree with the decision and need to register my view about it. However, I do not choose to block the decision and will stand aside. I am willing to support the decision because I trust the wisdom of the group.
5	I do not agree with the decision and feel the need to block this decision being accepted as consensus.
6	I feel that we have no clear sense of unity in the group. We need to talk more before consensus can be reached.

Measuring consensus in a team, adapted from Shani (2009)